Via Electronic Mail and UPS



March 27, 2019

David Turin
U.S. Environmental Protection Agency
5 Post Office Square – Suite 100
Mail Code: OES04-3
Boston, MA 02109-3912

Re: Hull WPCF Capacity, Management, Operation and Maintenance ("CMOM") Program

Implementation Annual Report

Town of Hull, MA Administrative Order on Consent, Docket No. CWA-01-AO-16-09

Dear Mr. Turin:

As identified in the Administrative Order on Consent (AOC), Woodard & Curran, on behalf of the Town of Hull is hereby submitting the Hull Water Pollution Control Facility (WPCF) CMOM Program Implementation Year 3 Annual Report for your review, comment and/or approval.

This report also serves as the fulfillment of the NPDES annual reporting requirements for the WPCF (NPDES Permit No. MA0101231). Woodard & Curran began operation and maintenance of the WPCF on April 1, 2015, and records are included from January 1, 2018 through December 31, 2018.

Sincerely,

WOODARD & CURRAN

Frank Cavaleri

Frank J. Cavaleri Senior Principal

FJC/fjc

Enclosures:

cc: David Burns, MassDEP Southeast Regional Office

Philip Lemnios, Town Manager, Town of Hull

John Struzziery, P.E., Director of Wastewater Operations, Town of Hull

Aram Varjabedian, Project Manager, W&C

Robert Scott, Area Manager, W&C

PN: 217319



CMOM ANNUAL REPORT

Calendar Year 2018

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commitment & integrity drive results

217319.00 **Town of Hull, MA** March 2019



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EXECUTIVE SUMMARY

Woodard & Curran holds a professional services contract for the operation and maintenance of the Water Pollution Control Facilities (WPCF) for the Town of Hull. Woodard & Curran (Contract Operator) began operation of the Hull WPCF facility on May 1, 2015. Woodard & Curran has prepared this Capacity Management Operation and Maintenance (CMOM) 3rd Annual Report to serve as a summary of maintenance and operation activities performed during 2018 to the Town of Hull's Wastewater System. The purpose is to document progress as required by the Administrative Order on Consent (AOC) and fulfill NPDES permit requirements for reporting I/I minimization.

This report includes the following AOC deliverables:

- 1. A detailed description of the actions taken during the previous calendar year to address action items included in the CMOM Corrective Action Plan.
- 2. A description of the actions that will be taken during the current calendar year to address action items included in the CMOM Corrective Action Plan.
- 3. A summary listing of all unauthorized discharges that have occurred during the last calendar year, in accordance with the NPDES Permit Section D.1.
 - a. A report of any infiltration/inflow related corrective actions taken, as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and NPDES Permit Part 1, Section D.1.
- 4. A map of the Town's Collection System showing the location of each unauthorized discharge included in the summary listing;

And the following NPDES permit deliverables:

- 5. A map and a description of inspection and maintenance activities conducted, and corrective actions taken during the previous year.
- 6. Expenditures for any infiltration/inflow related maintenance activities and corrective actions taken during the previous year.
- 7. A map with areas identified for I/I-related investigation/action in the coming year.
- 8. An estimate of the annual average I/I and the maximum month I/I for the reporting year.



1. COMPLETED PROJECTS

1.1 AOC Deliverables

The following AOC deliverables were completed:

CMOM Annual Report #2 – March 2018

1.2 CMOM Activities

During 2018, ongoing repairs and upgrades were performed at the WPCF. An updated copy of the "WPCF Rehabilitation Schedule" is included in Appendix A, to provide status updates since the March 2018 [Annual Year 2017 Report] deliverable. Some other plant upgrades started in 2018 include:

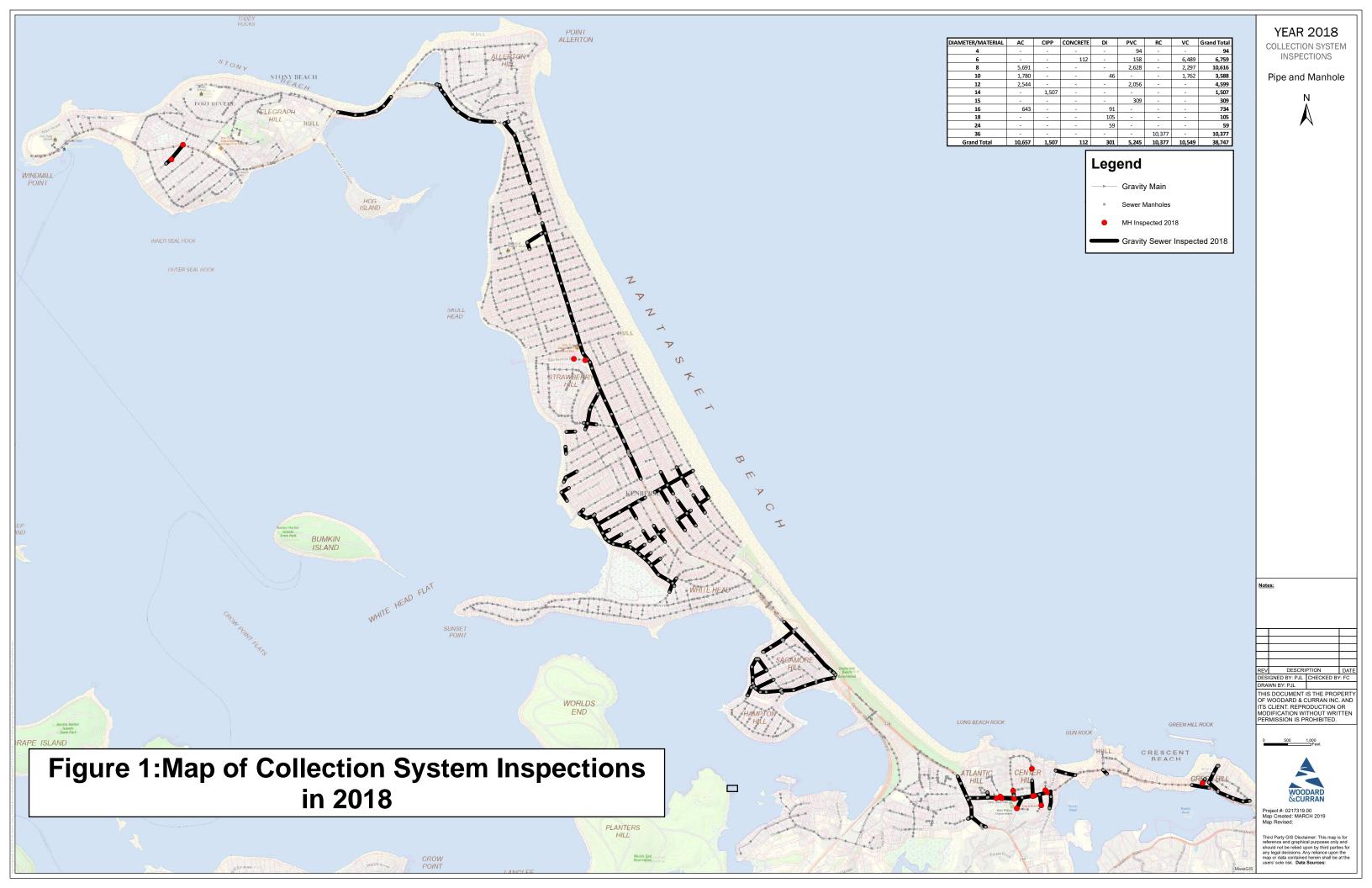
- a. Energy upgrades were started as part of a MADEP Energy Grant for 3 projects; aeration modifications, generator heat pump block heater and install a variable speed drives on the odor system fan. This project is scheduled to be completed spring 2019.
- b. Woods Hole Group provided planning documentation/reports for resiliency work; including developing Design Flood Elevations for the WPCF and remote Pump Stations
- c. A resiliency upgrade, funded by a MA CZM grant, was started to raise the main plant power transformer out of the flood zone and above the design flood elevation (DFE). This project is scheduled to be completed spring 2019.
- d. Removal of the underground UST diesel fuel tank and installation on a new above ground fuel tank on an elevated platform out of the flood zone and above the DFE is scheduled to be completed in spring 2019.
- e. Influent pumps piping and valve replacement.
- f. Sludge piping valve replacement.

During 2018, both the Town Sewer Department and Contract Operator performed corrective and preventative maintenance of the collection system, including:

- 47 Grinder pump customer service and corrective action calls
- Abatement of 11 Unauthorized Discharges
- Over 250 Dig Safe utility mark-outs
- Over the course of 2018, the Town completed a significant effort to clean and inspect highly critical portions
 of their collection system. These efforts are described in detail below, but generally were in response to future
 rehabilitation efforts (CWSRF #4445 Projects), sewer inspections in coordination with a Town wide Roadway
 Pavement Management Plan, and in response to customer complaints, sewer backups, or as directed by the
 Town's Wastewater Director.
 - Over 38,000 linear feet of PACP cleaning and CCTV inspection as summarized below, see Figure 1, (Collection System Inspections) for locations.



- Inspections related to the rehabilitation design for the Atlantic Avenue/Gunrock Area Sewer Renewal Project, including approximately 6,000 LF mainline inspection, 7 lateral inspections, and approximately 100 LF of force main inspection from Pump Station#1.
- Inspection related to the design for the Interceptor Pipeline Renewal Project, including inspection of approximately 11,000 LF of 36-inch RCP, a 4-barrell siphon, a 2-barrell lagoon crossing, and the removal of an existing storm drain crossing.
- Inspection of approximately 21,000 LF of sewer gravity main as part of a program to identify defective sewer infrastructure located along roadways to be paved in 2019.
- On-call CCTV inspections in response to sewer backups, customer complaints, or general system related maintenance were performed, some samples of this work are described below:
 - Pump Station6 Gravity Sewer Influent Backup
 - Newton Street Gravity Sewer Backup
 - Ocean Avenue Area Sewer/Drainage Inspection
- A summary of the 2018 completed SEMS Work Orders is attached in Appendix B. This is a summary of the completed work orders for the collection system, including the Pump Stations, and summarized by Asset Name and provides additional details for specific work performed.
- Ultrasonic thickness testing Pump Station #1 & 3 Forcemains were completed, and as a result Pump Station #1 force main will be renewed completely during the Atlantic Avenue/Gunrock Area Sewer Renewal and approximately 50-feet of the upstream end of FM for Pump Station3 will be renewed.
- Over 18 MACP Level 1 Manhole Inspections in 2018, see Figure 1 for locations:
 - Although this number seems low, due to the timing of projects the Town has already inspected 100 MACP Level 1 inspection in 2019.
 - The Town also completed 65 less detailed manhole inspections, including assessment of manhole frames and covers for structural condition and potential for inflow.
- As a follow up from last year, the Interceptor and Atlantic Avenue/Gunrock Area inspections, engineering design is complete (CWSRF #4445), and permission to bid has been granted by MassDEP with bidding in April 2019.
- Repair of the Pump Station 3 pumps, pump discharge fittings and bypass connection
- Implemented Hydrogen Sulfide (H2S) and Fats, Oils and Grease (FOG) reduction programs:
 - Continued In-pipe bacteria addition at 24 locations to grow non-sulfide generating bacteria to breakdown FOG within the Pump Station wet-wells and gravity system.
 - Continued Pilot Testing of Bioxide treatment at Pump Station #3 during -summer months to control downstream H2S.
 - Added Ferric Chloride at Pump Station 6, as needed during summer season, to reduce sulfides levels at the wastewater treatment facility





- o Replaced 6 manhole frames and/or covers that were damaged and/or sources of inflow.
- Replaced 2 frames and covers where existing covers had numerous holes that allowed inflow into the system.

The 2018 total for maintenance expenditures for CMOM and I/I are summarized in Appendix C.

1.3 Unauthorized Discharges

There were 11 unauthorized discharges in 2018. Included in this section are details regarding this year's discharges. The full Unauthorized Discharge Summary Table can be found in Appendix D.

The 11 unauthorized discharge locations documented in 2018 are shown in Figure 2 below. There were two unauthorized discharges at the WPCF, and nine sanitary sewer overflows (SSO's). Brief descriptions as well as current status of each unauthorized discharge are listed in chronological order below.





Figure 2: Map of Unauthorized Discharges in 2018

2018 SSO SUMMARY 2018

36 J Street

Status: Closed; Abated

On January 25, 2018 a homeowner experienced a backup of sewage into lower level shower, as a result of a sewer line blockage in a manhole at 34 L Street. Hull WPCF staff were dispatched. Upon arrival and investigation less than 25 gallons of sewage was estimated and contained within the shower stall. The sewer line manhole located at 34L Street [MH#20290] was found to be blocked and all flow from the Playground/Alphabet Street area was not flowing towards the Pump Station nearby [#6]. Since no flow was reaching the Pump Station, the next downstream manhole was found to be dry & clear [located inside playground by basketball courts]. National Water Main Co



[NWM]. was contacted to clear the blockage at the "L" Street manhole. While waiting for this assistance, the Hull WPCF staff set up a portable trash pump and pumped the sewage around the clogged manhole to relieve the surcharged sewers. The pumping lasted for approximately 2 hours and no additional back-ups were reported after the line was cleaned.

WPCF [1111 Nantasket Avenue]

Status: Closed; Abated

On March 3, 2018, disinfected wastewater overflowed from the Chlorine Contact Tanks [CCT] at the WPCF due to storm induced high flows of 8.0 MGD which exceeded plant design capacity. Approximately 25,000 gallons were released during the four-hour overflow, which occurred simultaneously at high tide, and mixed with surface water from area flooding on Spring Street. The Town of Hull received over 2.5 inches of rain during the 3/1-3/3 storm with a high tide recorded at 11.3 ft [with ~3-4 ft storm surge]. There was one catch basin on WPCF property adjacent to the CCT's which received overflow waters upon draining. All influent and effluent pumps were on line and operational during this event. Additional portable trash pumps were also in operation pumping flow up to the CCT's. The capacity of the facility's outfall was decreased during this high-tide event causing the back-up to the CCT.

Near 83 Main Street

Status: Closed; Abated

On March 5, 2018 – Leakage was seen from sewer lateral near 83 Main Street. Due to poor weather conditions a drain cleaning company was unavailable until the next morning. The blockage occurred near the street where the PVC pipe met the clay pipe in the road. "Budge-IT Drains" company cleared the blockage on 3/6/18 and cleaned up the affected area. It was estimated that less than 50 gallons overflowed. An additional and full cleaning of the street and area catch basins was also done on 3/7/18 by Truax Corporation. All stormwater manholes were vactored out of contents and washed down.

42 Valley Beach Road - Lift Station A

Status: Closed

On March 13, 2018 the Pump Station lost utility power, and the department's portable generator failed to start and could not provide power to the Pump Station. A portable trash pump was delivered to the location and set up, but pumping of sewage from the wet well to the force main could not be maintained. A discharge hose from the portable pump broke apart, spilling sewage onto the ground. Less than 100 gallons were released, and rain/snow made it difficult to clean the area. Most of the sewage infiltrated into the adjacent ground. A review of the bypass procedures and hook-ups done, as well as the necessary equipment required to run the bypass. A rental generator was brought in to power the Pump Station, until the utility power was restored.

24 Meade Ave

Status: Closed: Abated

On April 20, 2018 the Hull DPW notified the Hull WPCF of a slight leak around a manhole near 24 Meade Ave. The staff responded and outside assistance quickly solicited, since the manhole was fully charged J. Hoadley [Sewer Tech] responded and vacuumed this manhole # 20945 [rocks, brick fragments, debris found] and then jetted approximately 175 ft of sewer line upstream and downstream from this manhole. The area was washed down and cleaned. No release to the MS4 system. Estimated release was less than 20 gallons.



24 E Street

Status: Closed; Abated

On May 3, 2018 a call was made to the Sewer Department to report a sewage back-up into the lower level shower stall at 24 E Street residence. The back-up was contained to the shower. The staff was dispatched to the area [playground area/alphabet streets] and determined that the area sewers were surcharged similar to the event that occurred on 1/25/18. However, the manhole inside the playground by the basketball courts was blocked, and no flow was seen going toward the Pump Station 6. Rosano-Davis Pumping was immediately contacted to pump out down some of the surcharged sewage. Over 4-6 hours, approximately 40,000 gallons were pumped and delivered to a downstream manhole. A department portable trash pump was also set up to pump sewage around the affected manhole and discharge into a nearby manhole on Nantasket Ave. An estimated 20,000 gallons was pumped over a 2-hour period. National Water Main was contacted and arrived after the surcharge was reduced enough and they were able to jet/clear the blockage from the playground manhole towards "L" street.

A follow up investigation and service to this area was made on May 7, 2018. Truax Corporation was contracted to jet clean the sewer lines to and from MH #20283 located next to the basketball court area inside the "L" Street Playground. The line was also CCTV'd to obtain a complete inspection. A lot of settled debris was removed from the 12-inch sewer pipe. Additional "no pump activity" alarms were programmed into all Pump Station control panels

13 Newton Street

Status: Closed: Abated

On May 26, 2018, Hull WPCF staff responded to a call near 13 Newton Street. Upon arrival, it was determined that sewage was backing up and coming to the ground surface on the side of the road. The call had come in originally as an odor complaint due to the small amount of sewage on the road surface, however, upon further investigation, it was found that the VC sewer line had breaks, root intrusion, and was blocked. HUB construction was contacted and responded. Excavation made and approximately 20 ft of 6-inch pipe was replaced. NWM arrived in late evening to jet the line that was still partially clogged and cleared the debris. The release was estimated at less than 75 gallons.

42 Valley Beach Road - Lift Station A

Status: Closed

On June 12, 2018 Hull WPCF staff were performing preventive maintenance activities, where the bypass line valves were being exercised. In the process of exercising the 2-inch drain back valve, sewage started coming out of the valve gate box and leaking onto the ground and asphalt areas adjacent to the Pump Station building. Immediately the operations were halted, and the sewage flow was diverted back towards the wet well [about 2 feet away]. The release was less than 50 gallons and completely stopped about 30 minutes later, when the crew was able to shut the valve.

10-12 Rockaway Ave.

Status: Closed; Abated

On July 30, 2018 Hull WPCF staff were dispatched to a sewer leak at this address. Upon learning of the cause, a failed E-1 Grinder Pump, the staff contacted Rosano-Davis Pumping to pump down the grinder pump chamber to halt any additional discharge. The discharge from the pump chamber was estimated at less than 40 gallons. The pump chamber was pumped out and the grinder pump was replaced. Rosano-Davis also pumped and cleaned out the adjacent catch basin.



WPCF [1111 Nantasket Avenue]

Status: Closed

On August 8, 2018, while a 9000-gallon sludge truck was being filled, the truck was overfilled, causing a spill of sludge onto the asphalt driveway. Upon realizing the spill, the sludge transfer pump was immediately shut off, and sandbags set out to contain the sludge to a small area around the truck. A septic pump truck from Rosano-Davis was called in and the sludge was vacuumed up, and the area was washed down and disinfected. No liquid reached the MS4 system. Total gallons spilled was less than 30 gallons. The truck filling SOP was reviewed with staff and all truck drivers.

121 Nantasket Ave.

Status: Closed

On September 18, 2018 a rain event occurred, mostly during the mid-day hours that delivered 2.93 inches of rainfall over a very short period of time. The precipitation caused excessive street flooding, that led to a high amount of inflow to the sewer system. The manhole [#20897] in front of 121 Nantasket Ave. became surcharged and a release of sewage occurred for approximately 1 hour, coming up through the manhole pick holes. The total estimated release was approximately 600 gallons [10 gpm for an hour]. The roadway was impassible during the heaviest period of rain, and this release did reach the Town's MS4. All drainage led to the Atlantic Ocean, which was across the street.

1.4 Public Outreach

Appendix E is a copy of the 2018 Annual Report published by the Hull Sewer Department. In addition, quarterly newsletters are sent with the sewer bills to all sewer customers.

There was also a public meeting in May 2018 prior to the Annual Town Meeting to provide an understanding of the need and gain support for the Capital Funding program for system improvements.

This report and newsletters are examples of the Town's ongoing public outreach program.



2. ANNUAL AVERAGE AND MAXIMUM MONTH I/I ESTIMATES

2.1 I/I Estimates

Table 1 below includes I/I Estimates as calculated between January 1, 2018 – December 31, 2018. Previous years are listed for reference.

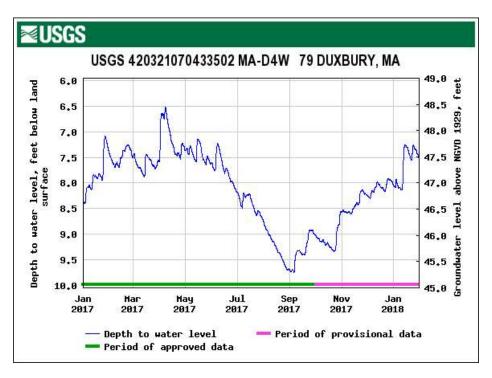
Table 1: I/I Estimates

Year	Average Annual (MGD)	Maximum Month (MGD)	WPCF Average Daily Flow (MGD)	Annual Rainfall (inches)
2002 – 2012*	0.3 - 0.5	0.5 - 0.83	1.55 – 1.9	-
2015	0.51	1.65	1.57	26"
2016	0.46	1.05	1.45	29"
2017	0.48	1.99	1.56	43"
2018	0.48	2.15	1.72	48

Daily WPCF Effluent Flow and Precipitation data was exported from the WPCF's Hach® WIMS™ data management system. I/I estimates were calculated by reviewing the highest and lowest 7-day moving averages in comparison to the Base Sanitary Flow (BSF) during the same timeframe. Rainfall increased from 40 inches in 2017 to over 48" of rainfall in 2018. Figure 3 below shows the seasonal groundwater decrease for Southeastern Massachusetts from 2017 to 2018, with net increase of about 1 to 1.5 inches.

^{**2013 – 2014} Data not available due to plant failure





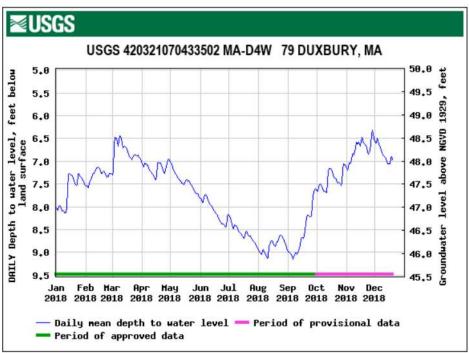


Figure 3: 2017 & 2018 Groundwater Monitoring Data, USGS



2.2 Pump Stations

New permanent flow meters have been installed at most Pump Stations, including PUMP STATIONS #3, 6, 9, A, and 1, Pump Station 4 and 5 need additional meter/piping upgrade work. The table below summarizes the current flow information from the Pump Stations.

Table 2: Pump Station Flows

	Calc. or ı	metered	Avg. GPM	calc. vs meter -	Control	ORIGINAL DESIGN	% current
PS	GPD - avg	GPD - Max	current estimate	early 2019	setting	GPM	design
Α	29,153	161,684	90	104%	on - off	200	45%
1	148,729	806,400	280	100%	on - off	450	62%
3	275,668	2,689,151	581	98%	VFD*	1,700	34%
4	160,312	923,086	518	206%	on - off	800	65%
5	316,971	1,001,777	1,200	256%	on - off	1,600	75%
6	50,593	104,198	620	96%	on - off	670	93%
9	175,513	1,942,896	500	97%	on - off	650	77%
Total MGD	1.16	7.63					
				*VFD vs 1	full speed		

Calculated flows are based on pump run times multiplied by the current estimated pump flow in GPM. This is typically estimated based on doing field draw down tests to estimate pump flow rate. Metered flows are based on the actual flow meter totals. The "calculated vs meter" column gives an estimate of how the actual flow meter compares to the calculated flow based on the draw down test data. The % of current estimate of flow capacity vs the original design capacity will be further evaluated during the upcoming Facility Plan project.

We installed a DERAGGER pump controller unit at Pump Station 6 in late 2018 and it continues to work extremely well, as the pump that it was installed on has not had to be manually cleaned since the unit was installed. In the past, the pumps at this Pump Station would clog on a regular basis, wasting energy and manpower. The unit has worked exceptionally, providing reduce maintenance and improving energy and pumping efficiency.



3. PLANNED CMOM AND I/I PROJECTS

3.1 AOC Deliverables

The deliverables left according to the original AOC, are the CMOM Annual Report (this report - due March 31, 2019) and CMOM 3rd Year Self-Assessment Checklist (due July 31, 2019).

3.2 CMOM Activities

As a part of collection system operations, manhole inspections are performed on a regular basis during homeowner backup calls, and in coordination with sewer cleaning/CCTV efforts. The DoForms NASSCO MACP Level 1 Inspection protocol has been converted to UtilityCloud for streamlined asset information. As stated in the 2017 I/I Control Plan, the following improvements to the infiltration and inflow reporting system have been implemented this year, with a measurement of success as described below:

- Utilization of Pump Station flow meters 5 of 7 have been improved, with continued improvement and future utilization of flow metering data from the Pump Stations planned.
- Ongoing collection system salinity checks (using handheld, portable meter)
- Continued support of Hydrogen Sulfide (H2S) and Fats, Oils and Grease (FOG) reduction programs:
 - o In-pipe bacteria addition of 24 locations; to grow non-sulfide generating bacteria to breakdown FOG within the Pump Station wet-wells and gravity system.
 - Maintain use of wet-well aerators at all Pump Stations, to break up FOG and reduce debris build-up between cleanings. Pump Station #3 aerator scheduled to be replaced in 2019.

Based on the Town's Fiscal Sustainability Plan (*Woodard & Curran, 2017*), the Town appropriated funding for the following collection system and WPCF related design and construction projects using the SRF CWSRF program:

Table 3: SRF CWSRF Projects

		Design Fee	Estimated	Estimated
		(Completed, Paid	Construction	Construction
CWSRF # 4445	Project	directly by Town)	Cost	Schedule (2019)
DED 6 1 1 1 1 4	Interceptor Pipeline			
DEP Contract No. 1	Renewal	\$103,000	\$4,500,000	May - October
	Atlantic			
DED C	Avenue/Gunrock Area			
DEP Contract No. 2	Sewer Renewal	\$102,000	\$2,775,000	May - November
DEP Contract No. 3	Critical Replacements	\$20,000	\$807,000	June - December

There are many ongoing WPCF projects planned for 2019, some key projects include:

- SRF Facility and Resiliency Planning Project covering both the WPCF and the Pump Stations
- RCM planning Project for the WPCF critical assets
- Headworks and Pump Station structural repairs
- HVAC system replacement design and construction



- Effluent Pump room upgrades
- Ongoing asset management repairs and upgrades under the base contract operations contract
- Ongoing SCADA system improvements
- MassCEC grant for implementation of Artificial Intelligence software data platform
- Collection System remedial measures in advance of roadway paving

3.3 Sewer System Evaluation Survey (SSES)

Proposed Sewer System Evaluation Survey (SSES) will be part of the Capacity, Management, Operation, and Maintenance (CMOM) Corrective Action Plan (CAP). The next step outlined in the CAP is to perform an updated SSES Survey for investigation for inflow and infiltration sources in areas identified in historic I/I report and current operational data, per AOC CMOM CAP item VI.A.2.

Various studies have been done over the years, including the 1999 I/I Summary study by Tighe & Bond, which reviewed several previous studies, including the 1974 study by Whitman & Howard, 1983 Evaluation by Black & Veatch report and the 1984 study by CDM. A more recent study of a portion of the system was performed in 2005 Straits Pond by W&C.

The SSES work planned work includes flow isolation of up to 75% of the collection system, CCTV inspection of 50% of pipe flow isolated, building inspections targeting illicit sump pump and rain leader/roof drain connections, and smoke testing. Work is expected to begin by mid/late 2019.

Underground piping and assets at the WPCF: There is considerable underground piping and wiring that has some history of failures, due mainly to corrosion and extended service life. Many of the pipelines have been on-line for over 40 years and require internal inspections and condition assessments, which will require by-pass pumping and/or similar measures to do the actual condition assessments, and during any upgrade work. The condition assessment will include specific tasks such as digging some test pits to expose underground piping, removing some sections of piping for evaluation by a corrosion engineer, ultra-sonic thickness testing, CCTV and other similar condition assessment techniques. Piping to be evaluated includes:

- 1. Influent 36-inch line from headworks to each influent wet well COMPLETED scheduled for rehabilitation
- 2. Influent pumps 8-inch and 16-inch forcemains
- 3. Effluent pumps 16-inch forcemain
- 4. Other underground piping
 - a. Building roof drain lines
 - b. Plant Water System underground piping and hydrants
 - c. Underground Town Water piping within the plant site
 - d. Underground RAS/WAS/Scum piping
 - e. Clarifier influent 16-inch Cl feed piping (both primary and secondary) and 20-inch Cl (secondary) effluent piping
 - f. Storm drains
 - g. Other misc. underground piping



Outfall Inspection and Capacity evaluation: The outfall has adequate capacity for normal flow, but not for extreme flow events, such as the "No-Name" storm of 1991. The outfall capacity was evaluated previously in 1977, 1984 and 1998. In 2002, the chosen upgrade to the outfall was to raise the walls of the chlorine contact by 3 feet to increase the head/capacity of the outfall during high flow events. Several requests have been submitted in the past to allow for diversion of extreme flows beyond the capacity of the treatment system; this currently occurs using portable emergency pumps on an as needed basis. The outfall capacity was recently exceeded during a storm event in April of 2017, when the effluent flow reached approximately 9.4 MGD per AOC CMOM CAP item IV.E.1, the evaluation will include:

- Inspection of existing outfall pipe and diffusers
- Update hydraulic assessment of outfall and chlorine contact tank
 - Analysis also includes addition of a pumping system to chlorine contact tank and outfall

3.4 Pump Stations

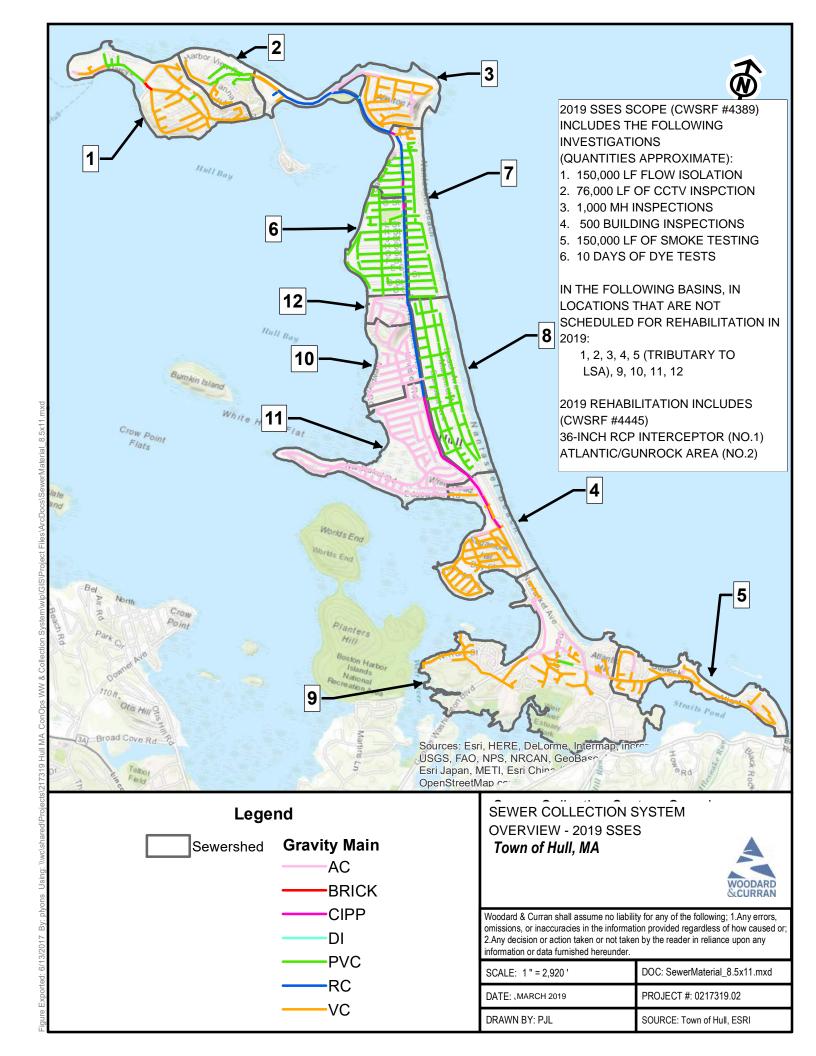
We will continue to upgrade the Pump Station flow meters during 2019 as well as enhance our use of the flow meter and runtime data from the SCADA system to better track Pump Station flows.

We plan to install a second DERAGGER unit on the other pump at Pump Station 6 and then evaluate installing more DERAGGER units at other Pump Stations, as well as within the WPCF.



APPENDIX A: CMOM ACTION PLAN CHECKLIST TABLE 3-1:WPCF IMPLEMENTATION SCHEDULE AND COLLECTION SYSTEM 2019 PLAN

Equipment/Process Cited	Deficiency (per inspection reports)	Corrective Action Planned	Implementation Schedule
Headworks Screening	Manual bar screens only, mechanical screen was Inoperable; headworks	New mechanical screen installed and operating. The influent gate was replaced Fall 2018.	Completed 2018
-	influent gate removed	Structural repairs and HVAC upgrades in progress	In Progress for 2019
Primary Clarifiers	Lack of Redundancy, only 1 in service	Short term actions: Both clarifiers are only used for high flow management, the fully functional clarifier is used seasonally and taken offline during summer season for improved odor and sludge control during summer season.	In Progress 2018
		Long term actions: Evaluate future use and/or repurposing of primary clarifiers during unit process evaluation.	Part of 2019 SRF funded Facility and Resiliency Plan
Aeration Tanks	Lack of Redundancy, 2 out of 4, out of service	Short term actions: Rehabilitated both mechanical aerators; some RAS piping needs replacement).	Completed 2018
		Long term actions: Review activated sludge process options to determine long term modifications to the aeration tanks and secondary treatment process.	Part of 2019 SRF funded Facility and Resiliency Plan
Secondary Clarifiers	Lack of Redundancy, only 1 in service	Both secondary clarifiers are partially functional [RAS draft tube system is not functional in either clarifier], but plant has been able to maintain compliance by pulling RAS and WAS from the WAS pits. Typically, one unit in service during normal flows, a second unit is put on-line during high flow events, but operational inspection is required. Short term actions: Performed inspection of one clarifier RAS line and found major corrosion in the piping; suspect same condition in the other	In process 2018
		Long term actions: Evaluate process alternatives and then determine repair or replacement of the clarifiers.	Part of 2019 SRF funded Facility and Resiliency Plan
Gravity Sludge Thickeners	Lack of Redundancy, only 1 in service	Gravity Thickener #2 has been abandoned-in-place, and Gravity Thickener #1 is functional, but offline during summer months for odor control and sludge management. Long term use of Gravity Thickeners for sludge processing will be considered during unit process assessment, and tanks may be repurposed for other use.	Part of 2019 SRF funded Facility and Resiliency Plan
Sludge Holding Tanks	Need work and corrosion corrective maintenance/repairs	Above-ground Holding Tank was drained, cleaned and repaired, and is in use. Sludge Holding Tank #2 is in use. Sludge Holding Tank # 1 is offline and needs aeration diffusers.	Part of 2019 SRF funded Facility and Resiliency Plan
Rotary Drum Thickener	Old, Corroded and Operable with no redundancy	Extensive corrosion corrective maintenance was performed, and RDT back to full operation. However, redundancy will be considered as a part of unit process review.	Part of 2019 SRF funded Facility and Resiliency Plan
Disinfection (Chlorination and Dechlorination)	Temporary replacement post- disaster recovery, seems to be operating well	System is fully operational, but a more permanent stormproof solution to be considered during unit process review. Some Hypochlorite distribution tubing permanent repairs need to implemented, pump and some containment area temporary repairs have been made.	Part of 2019 SRF funded Facility and Resiliency Plan
Building	Temporary offices still in parking lot	Temporary HVAC is still in place in the Control building, HVAC upgrades and office space repairs are under design by Tighe & Bond.	In Process – funded under Town Bonds
Emergency Diversion Pump	Available to be set up	Godwin diversion pump set up to bypass headworks and will be used as bypass pump for Headworks channel repairs, then moved to a permanent location.	In Process 2018
Emergency Generators	Smaller one needs preventative maintenance to be operable	Both generators and transfer switches have been repaired and are operational; Preventative maintenance ongoing as required. USE removal and new AST fuel tank project in process during 2018, completion early 2019.	In Process 2018





APPENDIX B: 2018 COLLECTION SYSTEM WORK ORDERS

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
3/9/2018	6859	PS A Sump Pump	Manual pumping out dry well due to ground water	Corrective Maintenance	Eric Sutton	Pumped ground infiltration water into wetwell about 3 "	completed
3/15/2018	6877	PS A Sump Pump	Install new sump pump	Corrective Maintenance	David Wilson	DW/JS/ES electrically isolated failed pump and uninstalled. Installed new pump and verified proper operation. Discharge pipe going into wetwell obstructed.	completed
2/14/2018	6680	PS A Pump 2	Change discharge & check valves station A pump 2	Corrective Maintenance	Jody St. George	Suction valve pump 2 does not seat properly and leaks by when fully closed at approximately 15 - 20 gpm	completed
6/14/2018	7005	PS A Pump 2	PS A Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
6/14/2018	7005	PS A Pump 2	PS A Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	Submersible pump.	completed
10/24/2018	8157	PS A Pump 2	Installed new pressure guage	Preventative Maintenance	David Wilson	Installed new pressure guage	completed
6/14/2018	7004	PS A Pump 1	PS A Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
6/14/2018	7004	PS A Pump 1	PS A Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	Submersible pump	completed
10/24/2018	8156	PS A Pump 1	Install pressure gauge	Corrective Maintenance	David Wilson	Installed new ball valve and pressure guage.	completed
1/18/2018	6375	PS A Piping and Valves	Replace pump 1 discharge & check valves	Corrective Maintenance	Jody St. George	Completed	completed
2/22/2018	6697	PS A Forcemain	Install isolation valve & change D.I. piping in drywell to pc for flowmeter	Corrective Maintenance	Jody St. George	Completed with Dave Wilson	completed
1/16/2018	6890	PS A Flow Meter	Install new Greyline flow meter	Corrective Maintenance	Jody St. George		completed
4/27/2018	7099	PS A Flow Meter	Calibration and scaled flow meter to match SCADA	Corrective Maintenance	Bill Boornazian	BB with SCADA support from Dave Kraus scaled the flow meter to match SCADA and recalibrated. Flow meter appears to be working accurately	completed
3/10/2018	6862	PS A Electrical MCC	Power loss - unexplainef	Corrective Maintenance	Aram Varjarbedian	Power loss at 1045am. Waited apprx 15 min. Then call HMLP. upon my arrival found power at meter, and new 200 amp breaker outside and under meter tripped. Had Kevin from HMLP reset. (Difficult). Inform glenn F. Since just done last tuesday.	completed
6/12/2018	7424	PS A By-Pass system	Install 90 elbo flange and QD fitting for bypass pumping	Corrective Maintenance	Jim Gagliard	Dave and Jim installed	completed
6/13/2018	7434	PS A By-pass drain down valve	Bypass drain valve replaced	Corrective Maintenance	Outside Contractor	BB oversaw construction efforts for excavation and replacement of the bypass drain valve which broke the day before during maintenance exercise. Aqua Line contractor performed the work hired thru Town. 2inch gate valve with compression couplings used.	completed
2/8/2018	6655	PS A Building	Pumped ground infiltration water out of lower level 3"	Corrective Maintenance	Eric Sutton	Opened wetwell inserted hose, plugged in sump	completed
10/23/2018	8145	PS A Building	Inspection of pump 1&2 volutes & impellers for debris	Corrective Maintenance	Eric Sutton	Eric Dave Aram on site. LOTO PERFORMED, closed suction and discharge valves removed pumps from volutes inspected impeller for debris. Pump one light debris, no debris.	completed
10/26/2018	8159	PS A Building	Transported portable generators due to weather	Corrective Maintenance	Eric Sutton	Eric Joe on site. Transported portable generator to station A. Ran GEN, no load, turned pumps off along with grid bee. Turned knife switch in off position in station. Flipped load breaker) ON in generator, flipped knife switch in the ON position in station. Put pumps in auto watched cycle. Also turned grid bee back ON. shut off generator, ran cord to block heater. All back to normal. SOP procedures followed.	completed
11/3/2018	8278	PS A Building	Transported generator to station A due to possible high winds	Corrective Maintenance	Eric Sutton	Eric Cody transported generator to station due to possible power outage	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
1/4/2018	6105	PS A	PS #A Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6288	PS A	PS #A Inspection - Monthly	Inspections	Eric Sutton		completed
6/7/2018	6966	PS A	PS #A Inspection - Monthly	Inspections	David Wilson	Dispatched To 6498798790	completed
6/7/2018	6966	PS A	PS #A Inspection - Monthly	Inspections	David Wilson	DW/JG No surface solids in wet well. No descrepancies found.	completed
8/2/2018	7333	PS A	PS #A Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Loud noise from pump assembly Wet Well- 50% High Level Drywell Float- Good Sump Pump- Dischaarge pipe clogged Misc- New horizontal crack on sea side of structure	completed
9/6/2018	7518	PS A	PS #A Inspection - Monthly	Inspections	David Wilson		completed
10/31/2018	8274	PS A	Wet well cleaning after forced main was cleaned	Preventative Maintenance	David Wilson	Pumped down wet well and had wind river vacuum up debris.	completed
12/6/2018	8039	PS A	PS #A Inspection - Monthly	Inspections	David Wilson		completed
1/3/2019	8746	PS A	PS #A Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
7/19/2018	7625	PS 9 Wet Well	High wetwell due to operator error	Corrective Maintenance	Eric Sutton	Eric Bill on site. Opened cabinet observed HOA switch was in wrong positions on both pumps	completed
10/4/2018	8111	PS 9 Wet Well	Wetwell cleaning	Corrective Maintenance	David Wilson	With wind river vac truck, clean wetwell, chk transducer.	completed
12/5/2018	8464	PS 9 Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Dave on site. Inspection of wetwell zero debris	completed
3/30/2018	6919	PS 9 Pump 2	Vfd control board bad.	Corrective Maintenance	Outside Contractor	Replace corroded control board. Andy had one in his inventory. CP assist.	completed
9/25/2018	7990	PS 9 Pump 2	Pump 2 lower flow	Corrective Maintenance	Jim Gagliard	Back floushed, seemed to help.	completed
9/25/2018	7991	PS 9 Pump 2	Low output from pump 2.	Corrective Maintenance	David Wilson	DW/JG verified flow at station. Let wet well level build and back flushed pump 2. From 670 to 880gpm.	completed
2/16/2018	6684	PS 9 Pump 1	Change flexible coupling	Corrective Maintenance	Jody St. George	New coupling installed, checked both hubs which were good, readjusted hubs for a tighter fit, now completed	completed
1/3/2018	6130	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6131	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6132	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6133	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6134	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6135	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/5/2018	6310	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/5/2018	6310	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/14/2018	6311	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6311	PS 9 Generator PS 9 Generator	PS #9 Generator Inspection and Test - Weekly PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance Preventative Maintenance	David Wilson David Wilson	While performing pump station checks an additional 20 minutes per station were spent on weekly generator inspection and testing.	completed
3/7/2018	6480	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	generator inspection and testing.	completed
3/28/2018	6483	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
3/28/2018	6483	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6598	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed

Schedule Date	wo#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
4/4/2018	6599	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/2/2018	6788	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6789	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/23/2018	6792	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6793	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6998	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6997	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
6/13/2018	6999	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	7000	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	7001	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	7000	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	7001	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/13/2018	6999	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018	6790	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018	6791	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
7/11/2018	7171	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7359	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/8/2018	7360	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7361	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7358	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7362	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7363	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
9/5/2018	7549	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/5/2018	7550	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/12/2018	7551	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7552	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7553	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8060	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8061	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8062	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8063	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8064	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George		completed
1/30/2019	8702	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/23/2019	8701	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8700	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/9/2019	8699	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8658	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8698	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
3/21/2018	6891	PS 9 Flow Meter	Install new Greyline flow meter	Corrective Maintenance	Jody St. George	5.5pato.ica 10 20/550104/	completed
1/4/2018	6104	PS 9	PS #9 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6287	PS 9	PS #9 Inspection - Monthly	Inspections	Eric Sutton	moperica stations and wet wells	completed
6/7/2018	6965	PS 9	PS #9 Inspection - Monthly	Inspections	David Wilson		completed
6/7/2018	6965	PS 9	PS #9 Inspection - Monthly PS #9 Inspection - Monthly	Inspections	David Wilson		completed
8/2/2018	7332	PS 9	PS #9 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Good overall Wet Well- 30% solids High Level Drywell Float- Good Sump Pump- Good Misc- None	completed
9/6/2018	7517	PS 9	PS #9 Inspection - Monthly	Inspections	David Wilson		completed
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Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
12/6/2018	8038	PS 9	PS #9 Inspection - Monthly	Inspections	David Wilson		completed
1/3/2019	8744	PS 9	PS #9 Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
9/18/2018	7978	PS 6 Sump Pump	Unclog sump pump 1, remove sump pump 2 due to failure	Corrective Maintenance	Jody St. George	Waiting for sump pump 2 replacement	completed
12/21/2018	8514	PS 6 Sump Pump	Replace Junction Box for PS #6 Sump Pumps	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced junction box for sump pump wiring	completed
12/12/2018	8488	PS 6 Sump Pump	Installed lag sump pump and piping.	Corrective Maintenance	David Wilson	Installed new sump pump.	completed
2/25/2018	6706	PS 6 Pump 2	Clogged pump 2/25 after sewer blockage	Corrective Maintenance	Aram Varjarbedian	Assisted by JB, DW, derag	completed
5/14/2018	7239	PS 6 Pump 2	Clear obstruction from pump 2 impeller.	Corrective Maintenance	David Wilson	DW/JS Electrically isolated pump and verified power. Removed clean out and pulled out a ball of rags.	completed
2/26/2018	6705	PS 6 Pump 1	Clogged pump 2/25	Corrective Maintenance	Aram Varjarbedian	2/25 Derag pump after sewer back up. No flow. AV, JB, DW.	completed
2/26/2018	6708	PS 6 Pump 1	Clear clog	Corrective Maintenance	Joe Basler	Completed	completed
3/4/2018	6833	PS 6 Pump 1	Observed low output of 464gpm(660gpm normally) Recommendation is to derag volute.	Corrective Maintenance	David Wilson	DW/JB/CP Electrically isolated pump 1. Closed suction and discharge valves. Removed access cover and removed blockage from volute. Returned to service and verified proper working condition	completed
4/10/2018	7060	PS 6 Pump 1	Deragging done on pump 1 and LOTO	Corrective Maintenance	Bill Boornazian	BB, JS and DW LOTO pump 1 and isolated pump for deragging. Removed apx 1/2 gallon of rags. Flow restored to 630+ GPM.	completed
5/3/2018	7215	PS 6 Pump 1	Deragg pump due to low	Corrective Maintenance	Eric Sutton	Eric Dave Joe on site, LOTO performed, shut suction and discharge valves removed debris installed inspection port opened valves turned pump on now pumping pump 1 @ 642 pump 2 @ 656	completed
5/31/2018	7396	PS 6 Pump 1	Low pump output	Corrective Maintenance	David Wilson	DW/JB/CP Electrically isolated pump. Hydraulically isolated pump. Opened volute and cleared obstruction. Returned to service. Pump output from 420 to 650gpm.	completed
7/2/2018	7604	PS 6 Pump 1	Low pump output. 420gpm (650gpm normally)	Corrective Maintenance	David Wilson	DW/JS/MA Electrically isolated pump 1. Closed suction and discharge valves. Opened volute and cleared obstruction. Returned to service. 645gpm output.	completed
7/18/2018	7621	PS 6 Pump 1	Deragg pump due to low	Corrective Maintenance	Eric Sutton	Eric Joe Mike on site, LOTO performed. Joe Mike shut suction and discharge. Opened port removed debris reinstalled inspection port opened valves turned pump on now pump operational	completed
8/20/2018	7784	PS 6 Pump 1	Deragg pump due to low flow	Corrective Maintenance	Eric Sutton	Eric Dave Mike on site. Loto performed. Shut suction and discharge valve, removed inspection port, removed debris, reinstalled port, opened suction and discharge valve. Turned pump on now pumping st optamal flow 650 gpm	completed
9/4/2018	7924	PS 6 Pump 1	Removal of debris pump 1&2	Corrective Maintenance	Eric Sutton	Eric Dave Cody on site Loto performed closed suction and discharge on both pumps removed inspection port on both pumps removed debris reinstalled inspection ports opened suction and discharge started pumps now operational st optamal flow	completed

10/15/2018				Туре	Employee	History Notes	Status
	8126	PS 6 Pump 1	Removal of debris	Corrective Maintenance	Eric Sutton	Eric Dave Jim on site. Loto performed shut suction and discharge valves, opened inspection port removed debris reinstalled inspection port opened suction and discharge valves, started pump now operational	completed
1/3/2018	6136	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6137	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6138	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6139	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6140	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6141	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/5/2018	6315	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/5/2018	6315	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	·	completed
2/14/2018	6681	PS 6 Generator	Block heater replacement.	Corrective Maintenance	David Wilson	Removed failed block heater and installed replacement. Filled cooling system and ran generator. Burped cooling system and set fluid level.	completed
2/14/2018	6316	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6316	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/21/2018	6317	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	While performing pump station checks an additional 20 minutes per station were spent on weekly generator inspection and testing.	completed
3/7/2018	6489	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
3/28/2018	6492	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
3/28/2018	6492	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6603	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
4/4/2018	6604	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/2/2018	6794	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/2/2018	6799	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/23/2018	6797	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6798	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	7006	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	7010	PS 6 Generator	PS #6 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
6/13/2018	7007	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	7008	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	7009	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	7008	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	7009	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/13/2018	7007	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018	6795	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018	6796	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
7/11/2018 8/20/2018	7175 7783	PS 6 Generator PS 6 Generator	PS #6 Generator Inspection and Test - Weekly Waterpump seal starting to let go.	Preventative Maintenance Corrective Maintenance	David Wilson David Wilson	While conducting weekly no load, I observed the waterpump weeping. Tell tale for a waterpump seal about to fail.	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
8/22/2018	7787	PS 6 Generator	Coolant leaking from waterpump.	Corrective Maintenance	David Wilson	While conducting weekly no load, I observed the waterpump weeping. Working with Highland Power, we inspected the waterpump shaft seal and found source of leak. Highland power replaced two hose clamps and a rubber cap. Verified proper working condition.	completed
8/1/2018	7365	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/8/2018	7366	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7367	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/20/2018	7783	PS 6 Generator	Waterpump seal starting to let go.	Corrective Maintenance	David Wilson	Worked with Highland Power to diagnose source of coolant leak. Found two hose clamps and a rubber cap that needed to be replaced. 8/21/18 Highland Power returned with the parts for repair. Verified generator functiog properly.	completed
8/1/2018	7364	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7368	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7369	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
9/5/2018	7558	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/5/2018	7559	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/12/2018	7560	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7561	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7562	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8065	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8066	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8067	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8068	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8069	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George	Discrete had To 2070564647	completed
1/30/2019 1/23/2019	8693 8692	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2 SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8691	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed completed
1/9/2019	8690	PS 6 Generator PS 6 Generator	PS #6 Generator Inspection and Test - Weekly PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647 Dispatched To 2079561647	completed
1/2/2019	8689	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8656	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
6/12/2018	7427	PS 6 By-Pass system	Install flange QD and cover on bypass piping	Corrective Maintenance	Jim Gagliard	Dave & Jim installed	completed
8/31/2018	7922	PS 6 Building	Eliminate extension cords for ferric pump and gridbee	Corrective Maintenance	Outside Contractor	Glenn F, install conduit and dedicated circuits for gridbee aerator and ferric feed pump. Also insp floats for duplex sump and receptacle by scada panel. 1 sump pump probably no good.	completed
1/4/2018	6103	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6286	PS 6	PS #6 Inspection - Monthly	Inspections	Eric Sutton		completed
6/7/2018	6964	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson		completed
6/7/2018	6964	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson		completed
8/2/2018	7331	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Good overall Wet Well- Unknown High Level Drywell Float- Does not work Sump Pump- Good Misc- Upper ladder mount	completed
9/6/2018	7516	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson		completed
12/6/2018	8037	PS 6	PS #6 Inspection - Monthly	Inspections	David Wilson		completed
1/3/2019	8742	PS 6	PS #6 Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
1/18/2018	6376	PS 5 Wet Well	PS 5 Wet well cleaning with Wind River	Corrective Maintenance	David Wilson	Vaccumed out all surface solids from wetwell.	completed
12/7/2017	6184	PS 5 Wet Well	Debris in wetwell 75% coverage	Corrective Maintenance	Eric Sutton	windriver in on site vactured wetwell	completed
2/16/2018	6685	PS 5 Wet Well	50% coverage wetwell inspection	Corrective Maintenance	Eric Sutton	Eric Brett wetwell inspections and salinity samples observed 50 % coverage of debris at bottom of wetwell	completed
2/16/2018	6685	PS 5 Wet Well	50% coverage wetwell inspection	Corrective Maintenance	Eric Sutton	truax on site for the day clean wet well and other projects in town	completed
10/4/2018	8112	PS 5 Wet Well	Wetwell cleaning	Corrective Maintenance	Aram Varjarbedian	Aram, Dave & WRE vac truck clean wetwell. Approx 90% covered. Cleaned to less than 20%. Attempt to Insp transducer, but could not clean tube enough to pull out.	completed
12/5/2018	8462	PS 5 Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Dave on site. Inspection of wetwell 40% coverage	completed
1/26/2018	6531	PS 5 Pump 2	Pump 2 not running	Corrective Maintenance	Eric Sutton	Eric Jodi on site, observed pump not operating, checked VFD found fault on panel, reset panel, bled pump now operational. Possible when running generator load on station VFD had tripped, will observe next time we run generator on load.	completed
6/10/2018	7418	PS 5 Pump 2	Pump not running. Unknown cause	Corrective Maintenance	David Wilson	With AV, chkd station and found VFD tripped on overvoltage. Unknown cause. Chk, reset vfd, check pump operation OK. Amps=47; P1 amps= 56.	completed
1/3/2018	6124	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6129	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6125	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6126	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6127	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6128	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/7/2018	6304	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/7/2018	6304	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/14/2018	6305	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6305	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/21/2018	6306	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	While performing pump station checks an additional 20 minutes per station were spent on weekly generator inspection and testing.	completed
3/7/2018	6470	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
3/28/2018	6473	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
3/28/2018	6473	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6593	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6597	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6782	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6783	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/23/2018	6786	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6787	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6988	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6992	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
6/13/2018	6989	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6990	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6991	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6990	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6991	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018	6784	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018	6785	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
7/11/2018	7165	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7352	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/8/2018	7353	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7354	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7357	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7355	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7356	PS 5 Generator		Preventative Maintenance		Bulk close out	completed
9/5/2018	7540	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard David Wilson	Bulk close out	completed
9/3/2016	7540	PS 5 Generator		Preventative Maintenance	David Wilson		completed
9/5/2018	7544	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/12/2018	7541	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7542	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7543	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8055	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8056	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8057	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8058	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8059	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George		completed
1/30/2019	8684	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/23/2019	8683	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8682	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/9/2019	8681	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8654	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8680	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2018	6892	PS 5 Flow Meter	Install new Greyline flow meters	Corrective Maintenance	Jody St. George		completed
6/12/2018	7426	PS 5 By-Pass system	Install flange QD and cap	Corrective Maintenance	Jim Gagliard	Dave and Jim installed	completed
1/4/2018	6102	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6285	PS 5	PS #5 Inspection - Monthly	Inspections	Eric Sutton	,	completed
6/7/2018	6963	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson		completed
6/7/2018	6963	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson		completed
8/1/2018	7753	PS 5	Wet Well cleaning, wind river	Corrective Maintenance	Eric Sutton	Wind river onsite, cleaned wet well	completed
8/2/2018	7330	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Good overall Wet Well- 50% solids High Level Drywell Float- Good Sump Pump- Good Misc- None	completed
9/6/2018	7515	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson		completed
12/6/2018	8036	PS 5	PS #5 Inspection - Monthly	Inspections	David Wilson	Approximately 50% surface solids in wet well.	completed
1/3/2019	8740	PS 5	PS #5 Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
10/3/2018	8113	PS 4 Wet Well	Wetwell cleaning	Corrective Maintenance	Aram Varjarbedian	Aram, Dave and WRE vac out and clean. Pull up aerator and clean also. Clean tube for transducer, but could not pull up for inspection.	completed
12/4/2018	8461	PS 4 Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Cody on site inspected WW. Zero debris	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
9/1/2018	7923	PS 4 Pump 2	Pump not pumping	Corrective Maintenance	Aram Varjarbedian	Return visit with Joe. Found pump was air bound. Unclog bleeder, bleed off air. Got pump to pump ok. The pump had sat idle too long.	completed
4/29/2018	7206	PS 4 Pump 1	Low flow from pump #1, High wet well level	Corrective Maintenance	Jim Gagliard	Jim & Dave arrived on site at about 6:30am. Put pump #2 in hand, this pump primmed and showed normal flow of about 600gpm. Used Pump #2 to flush back #1 pump, ran pump #1 now at about 475 gpm. Left both pumps in auto, wet well now at normal operating levels.	completed
1/3/2018	6118	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6119	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6120	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6121	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6122	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6123	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/4/2018	6300	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/4/2018	6300	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/14/2018	6301	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6301	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/21/2018	6302	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	While performing pump station checks an additional 20 minutes per station were spent on weekly generator inspection and testing.	completed
3/7/2018	6464	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
3/28/2018	6467	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
3/28/2018	6467	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6588	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
4/4/2018	6589	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/2/2018	6776	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/2/2018	6781	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/23/2018	6779	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6780	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6981	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
6/6/2018	6982	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/13/2018	6983	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6984	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6985	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6984	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6985	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018	6777	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018	6778	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
7/11/2018	7161	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7347	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
8/8/2018	7348	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7349	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7346	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7350	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7351	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
9/5/2018	7533	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/5/2018	7534	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/12/2018	7535	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7536	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7537	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8050	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8051	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8052	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8053	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8054	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George		completed
1/30/2019	8666	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/23/2019	8665	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8664	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/9/2019	8663	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8662	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8652	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
3/21/2018	6893	PS 4 Flow Meter	Install new Greyline flow meter	Corrective Maintenance	Jody St. George		completed
4/5/2018	7053	PS 4 Building	No power at station- 12:20am	Corrective Maintenance	Aram Varjarbedian	Power loss call to Joe B. 1220am Generator running. Contact HMLP at 7am, after fuse on line outside was open, and one leg of power not there.	completed
7/19/2018	7624	PS 4 Building	Sump pump inoperable	Corrective Maintenance	David Wilson	Uninstalled sump pump. Installed isolation valve and check valve on discharge line. Verified operation.	completed
1/4/2018	6101	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6284	PS 4	PS #4 Inspection - Monthly	Inspections	Eric Sutton		completed
3/28/2018	6913	PS 4	Sink hole in parking area near electric MH	Corrective Maintenance	Jim Gagliard	Needs filling	completed
6/7/2018	6962	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson	Dispatched To 6498798790	completed
6/7/2018	6962	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson	DW/JG Wet well has about 20% surface solids. No descrepancies found.	completed
3/28/2018	6913	PS 4	Sink hole in parking area near electric MH	Corrective Maintenance	Jim Gagliard	Sinkhole filled in with gravel by DPW	completed
8/2/2018	7329	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Whirring noise from rotoating assembly Wet Well- 20% solids High Level Drywell Float- Good Sump Pump- Good Misc- Lower ladder mount loose	completed
9/6/2018	7514	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson		completed
12/6/2018	8035	PS 4	PS #4 Inspection - Monthly	Inspections	David Wilson		completed
1/3/2019	8738	PS 4	PS #4 Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
10/4/2018	8118	PS 3 Wet Well	Wet well cleaning needed	Corrective Maintenance	Outside Contractor	Dave assisted WRE vac truck and cleaned wetwell	completed
12/4/2018	8459	PS 3 Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Cody on site. Inspection of wetwell. Zero debris	completed
1/16/2018	6387	PS 3 Pump 2	Remove clog & remove clean out	Corrective Maintenance	Jody St. George	Completed	completed
6/14/2018	6980	PS 3 Pump 2	PS #3 Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
6/14/2018	6980	PS 3 Pump 2	PS #3 Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	DW/JG Greased pump motor and drive assembly. No unusual vibrations or noises. No visible wear on coupling. Protective netting in place. Pump seal dry.	completed
1/16/2018	6372	PS 3 Pump 1	Remove clog from pump 1	Corrective Maintenance	Jody St. George	Completed	completed
6/14/2018	6979	PS 3 Pump 1	PS #3 Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
6/14/2018	6979	PS 3 Pump 1	PS #3 Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	DW/JG Greased pump motor and drive assembly. No unusual vibrations or noises. No visible wear on coupling. Protective netting in place. Pump seal dry.	completed
1/16/2018	6373	PS 3 Piping and Valves	Exercise isolation valve station 3	Corrective Maintenance	Jody St. George	Completed	completed
1/3/2018	6112	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6117	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6113	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6114	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6115	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6116	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/4/2018	6294	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/4/2018	6294	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/14/2018	6295	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6295	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/21/2018	6296	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	While performing pump station checks an additional 20 minutes per station were spent on weekly generator inspection and testing.	completed
3/20/2018	6887	PS 3 Generator	While doing weekly no loads, charging system failure light came on.	Corrective Maintenance	David Wilson	Verified battery voltage off and on. Running battery voltage was 15vdc. I think alternator and regulator were replaced around September to October. Did not find issue causing light to come on.	completed
3/20/2018	6887	PS 3 Generator	While doing weekly no loads, charging system failure light came on.	Corrective Maintenance	David Wilson	Diagnosed and corrected charging system issue. Load tested battery, inspected charging system and all wireing associated. Found a couple of loose terminals inside of control unit as well as at starter post. Tightened all connections and verified fix by load testing generator unit.	completed
3/7/2018	6456	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
3/28/2018	6459	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
3/28/2018	6459	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6583	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6587	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6770	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6771	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/23/2018	6774	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6775	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6974	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6978	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
6/13/2018	6975	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6976	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6977	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6976	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6977	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018	6772	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018	6773	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
7/11/2018	7155	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/1/2018	7340	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/8/2018	7341	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7342	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
			PS #3 Generator Inspection and Load Test -				·
8/1/2018	7345	PS 3 Generator	Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7343	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7344	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
9/5/2018	7526	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/5/2018	7530	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/12/2018	7527	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7528	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7529	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8045	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8046	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8047	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8048	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8049	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George		completed
1/30/2019	8675	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/23/2019	8674	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8673	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/9/2019	8672	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8650	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8671	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2018	6894	PS 3 Flow Meter	Install new Greyline flow meter	Corrective Maintenance	Jody St. George	·	completed
6/12/2018	7423	PS 3 By-pass system (New)	Install 90 elbo flange and QD for bypass pumping	Corrective Maintenance	Jim Gagliard	Dave & Jim installed	completed
1/4/2018	6100	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6283	PS 3	PS #3 Inspection - Monthly	Inspections	Eric Sutton	mspected stations and wet wens	completed
6/7/2018	6961	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson	Dispatched To 6498798790	completed
6/7/2018	6961	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson	DW/JG Wet well has about 15% surface solids. No descrepancies found.	completed
6/13/2018	7432	PS 3	Took in 3800 gallons of Bioxide	Corrective Maintenance	Bill Boornazian	Evoqua delivery 3800 gallons into bulk tank at PS3. Bioxide dosing start day TBD and dosing rate. BB met driver onsite for filling of tank.	completed
8/2/2018	7328	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Good overall Wet Well- 30% solids High Level Drywell Float- Good Sump Pump- Good Misc- Lower ladder mount loose	completed
9/6/2018	7513	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson		completed
	8034	PS 3	PS #3 Inspection - Monthly	Inspections	David Wilson		completed
12/6/2018	0034	133	1 3 #3 inspection - Monthly	spections			Completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
3/6/2018	6840	PS 1 Wet Well	Inspected pumps and flows	Corrective Maintenance	Bill Boornazian	Lead pump won't shut off dose not matter which pump is in lead. Blew back pumps thru check valves. Pumps operating good. Calculated 375+ GPM clear water pouring into wet well. Two pumps needed to handle flows.	completed
4/5/2018	7052	PS 1 Wet Well	Truax on site maintaining wetwell empty for clearing debris in pumps. Also street bypass with 6" trash pump	Corrective Maintenance	Eric Sutton	Set vactor truck at wetwell and trash pump in street to bypass station Aram Bill working on pumps with New England pump and valve, Pete being top attendant in station, Eric in street watching trash pump and level of Manhole	completed
4/26/2018	7095	PS 1 Wet Well	Confined space entry in Wetwell (Jodi) clean excess debris from WW,	Corrective Maintenance	Eric Sutton	fire dept notified. Jodi entered WW cleaned excess debris (pic pipe, old transducer, tubing, and freed up operational transducer	completed
10/4/2018	8120	PS 1 Wet Well	Wet well needs cleaning	Corrective Maintenance	Outside Contractor	WRE Vac truck cleaned wetwell, assisted by Dave W. Pull up aerator and clean, and clean transducet.	completed
12/4/2018	8458	PS 1 Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Cody on site inspected WW. Zero debris	completed
4/27/2018	7102	PS 1 Pump 2	Replace motor guard and elec. Cover pump 2	Corrective Maintenance	Jody St. George	Completed	completed
6/1/2018	7397	PS 1 Pump 2	Soft starter replaced	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced failed soft start on pump 2 with new unit.	completed
6/5/2018	7406	PS 1 Pump 2	Low pump output.	Corrective Maintenance	David Wilson	DW/ES/AV Electrically isolated pump 2. Tried to remove lower clean out but parts were seized together. Removed side cleanout and remove compacted rags from impeller. Made new gasket for cleanout. Returned pump to service. Op tested pump- 325gpm (was 20gpm)	completed
6/14/2018	6973	PS 1 Pump 2	PS #1 Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
6/14/2018	6973	PS 1 Pump 2	PS #1 Pump 2 PM - Quarterly	Preventative Maintenance	David Wilson	DW/JG Greased pump motor and drive assembly. No unusual vibrations or noises. No visible wear on coupling. Protective netting in place. Pump seal dry.	completed
2/8/2018	6658	PS 1 Pump 1	Pump 1 Low GPM - need to pull pump	Corrective Maintenance	Bill Boornazian	Pulled the pump - draining in the garage	completed
2/8/2018	6658	PS 1 Pump 1	Pump 1 Low GPM - need to pull pump	Corrective Maintenance	Bill Boornazian	Ordered new bearings	completed
2/8/2018	6658	PS 1 Pump 1	Pump 1 Low GPM - need to pull pump	Corrective Maintenance	Bill Boornazian	Installed new bearings, rei	completed
4/27/2018	7103	PS 1 Pump 1	Replace motor guard	Corrective Maintenance	Jody St. George	Completed	completed
5/22/2018	7259	PS 1 Pump 1	Low flow from pump 1.	Corrective Maintenance	David Wilson	DW/AV/ES Electrically isolated pump motor. Isolated suction and discharge valves. Seperated motor from impeller/mount assembly. Seperated impeller/mount assembly from volute. Cleaned volute. Removed lower clean out and cleared debris from reducer. Reassembled pump 1 and returned to service. 360gpm output.	completed
6/14/2018	6972	PS 1 Pump 1	PS #1 Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
6/14/2018	6972	PS 1 Pump 1	PS #1 Pump 1 PM - Quarterly	Preventative Maintenance	David Wilson	DW/JG Greased pump motor and drive assembly. No unusual vibrations or noises. No visible wear on coupling. Protective netting in place. Pump seal dry.	completed
8/20/2018	7782	PS 1 Pump 1	Deragg pump due to low flow	Corrective Maintenance	Eric Sutton	Eric Dave Mike on site. Loto performed. Shut suction and discharge valve, removed inspection port, removed debris, reinstalled port, opened suction and discharge valve. Turned pump on now pumping st optamal flow 650 gpm	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
9/18/2018	7977	PS 1 Pump 1	Removal of debris	Corrective Maintenance	Eric Sutton	Eric Jim Jodi on site, loto performed shut suction and discharge valves, removed inspection port, removed debris reinstalled inspection port opened suction and discharge started pump now operational	completed
4/16/2018	7071	PS 1 Piping and Valves	Install new bleeder pressure gauge plumbing	Corrective Maintenance	Jody St. George	Dave Wilson assisted	completed
4/23/2018	7085	PS 1 Piping and Valves	Prepare hardware for removal of forced main piping.	Corrective Maintenance	David Wilson	Removed hardware from three way to tapered pipe. Installed new hardware. Removed hardware from forced main isolation valve. Installed new hardware.	completed
4/25/2018	7092	PS 1 Piping and Valves	Fabricate & install support under isolation valve	Corrective Maintenance	Jody St. George	Completed	completed
1/3/2018	6106	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson	Dispatched To 3392148331	completed
1/3/2018	6107	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Rick Clark	Dispatched To 3392148331	completed
1/3/2018	6106	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/3/2018	6107	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/10/2018	6108	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/17/2018	6109	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/24/2018	6110	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
1/31/2018	6111	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Bill Boornazian	Al Load & No Load runs completed for the month	completed
2/4/2018	6290	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/4/2018	6290	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
2/14/2018	6291	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Dispatched To 6498798790	completed
2/14/2018	6291	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
3/7/2018 3/28/2018	6450 6453	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Discretch ad Ta C400700700	completed
3/28/2018	6453	PS 1 Generator PS 1 Generator	PS #1 Generator Inspection and Test - Weekly PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance Preventative Maintenance	David Wilson David Wilson	Dispatched To 6498798790	completed completed
4/4/2018	6579	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
4/4/2018	6578	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/2/2018	6769	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
5/23/2018	6767	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/30/2018	6768	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6968	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/6/2018	6967	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
6/13/2018	6969	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6970	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6971	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/20/2018	6970	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
6/27/2018	6971	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/9/2018 5/16/2018	6765 6766	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
5/16/2018 7/11/2018	7151	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/3/2018	7759	PS 1 Generator PS 1 Generator	PS #1 Generator Inspection and Test - Weekly Replace broken fan belts	Preventative Maintenance Corrective Maintenance	David Wilson Jody St. George	Completed	completed completed
8/1/2018	7335	PS 1 Generator PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson	Completed	completed
8/8/2018	7336	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
8/15/2018	7337	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
8/1/2018	7334	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
8/22/2018	7338	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
8/29/2018	7339	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Jim Gagliard	Bulk close out	completed
9/5/2018	7519	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
9/5/2018	7520	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/12/2018	7942	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/19/2018	7943	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
9/26/2018	7944	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/5/2018	8040	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly	Preventative Maintenance	David Wilson		completed
12/5/2018	8041	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/12/2018	8042	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/19/2018	8043	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	David Wilson		completed
12/26/2018	8044	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	Jody St. George		completed
1/30/2019	8624	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/23/2019	8623	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/16/2019	8622	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/9/2019	8621	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
1/2/2019	8620	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079361647 Dispatched To 2079561647	completed
1/2/2019	8020	F3 1 dellerator	PS #1 Generator Inspection and Load Test -	Freventative Maintenance	SLIVIS TABLET #2	Dispatched TO 2079301047	completed
1/2/2019	8648	PS 1 Generator	Monthly	Preventative Maintenance	SEMS TABLET #2	Dispatched To 2079561647	completed
3/21/2018	6895	PS 1 Flow Meter	Install new Greyline flow meter	Corrective Maintenance	Jody St. George	Flow meter put on newly installed PVC Forcemain	completed
4/27/2018	7098	PS 1 Flow Meter	Flow meter put on newly installed PVC and calibration.	Corrective Maintenance	Bill Boornazian	section and working with good signal strength. Flows appear accurate after calibration. Also scaled greyline meter to match SCADA program. 20ma is 800gpm. BB and Jody with scada support from Dave Kraus	completed
4/28/2018	7217	PS 1 Electrical MCC	Soft start replace.ent	Corrective Maintenance	Outside Contractor	Replaced failed soft start unit with new SquareD unit and breaker. Program unit and test ok. For pump No. 1.	completed
4/4/2018	7050	PS 1 By-Pass System	Bypassed station 1 due to pumps being clogged during street cleaning	Corrective Maintenance	Eric Sutton	Eric Bill Aram Pete installed 6" pump at wetwell with float system in place. Isolated pumps shutting suction and discharge. Lowered floats watch pump cycle, station operational from bypass.	completed
4/26/2018	7094	PS 1 By-Pass System	By-passed station for pipe work	Corrective Maintenance	Eric Sutton	Eric Dave Bill Aram Jodi Truax ,Hart all on site for the day . Used 6" trash pump in st to bypass station. Isolated station with plug. At end of day released plug for station normal operation.	completed
6/12/2018	7421	PS 1 By-Pass System	Installed QD Cap on bypass pipe.	Corrective Maintenance	Jim Gagliard	Keep debis out of pipe.	completed
11/16/2018	8320	PS 1 Building	Ran portable generator under load	Corrective Maintenance	Eric Sutton	Following SOP ran generator under load. SOP also into of bypass panel, created by Jim G	completed
12/8/2018	8484	PS 1 Building	Bldg Heater Replacement	Corrective Maintenance	Outside Contractor	Glenn Fellows of FES replaced heater	completed
1/4/2018	6099	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson	Inspected stations and wet wells	completed
2/1/2018	6282	PS 1	PS #1 Inspection - Monthly	Inspections	Eric Sutton		completed
4/26/2018	7096	PS 1	W/C, Truax, Hart on site for the day	Corrective Maintenance	Eric Sutton	All on site for several projects, bypass station with 6" pump in st, cleaning of WW and remove excess debris, WE confine space entry, Hart replaced 8" discharge pipe, cleaning of valves at pumps, check pumps for operation. See picture of notes for details	completed
6/7/2018	6960	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson	Dispatched To 6498798790	completed
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Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
6/7/2018	6960	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson	DW/JG Less than 5% surface solids found in wet well. No descrepancies.	completed
8/21/2018	7327	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson	Pump 1- Good overall Pump 2- Whirring noise from rotoating assembly Wet Well- No solids High Level Drywell Float- Good Sump Pump- Good Misc- None	completed
9/6/2018	7512	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson		completed
12/6/2018	8033	PS 1	PS #1 Inspection - Monthly	Inspections	David Wilson		completed
1/3/2019	8736	PS 1	PS #1 Inspection - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
11/29/2018	8513	PS #5 ELECTRIC UNIT HEATER	Replace PS #5 Electric Unit Heater & Install Wall Thermostat	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced electric unit heater & installed wall thermostat	completed
11/29/2018	8512	PS #4 ELECTRIC UNIT HEATER	Replace PS #4 Electric Unit Heater & Install Wall Thermostat	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced electric unit heater & installed wall thermostat	completed
11/29/2018	8511	PS #3 ELECTRIC UNIT HEATER	Replace PS #3 Electric Unit Heater & Install Wall Thermostat	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced electric unit heater & installed wall thermostat	completed
11/29/2018	8496	PS #1 ELECTRIC UNIT HEATER	Replace PS #1 Electric Unit Heater & Install Wall Thermostat	Corrective Maintenance	Outside Contractor	Glenn Fellows replaced electric unit heater & installed wall thermostat	completed
11/5/2018	8295	Portable Diesel Pump 6B Thompson 6" 900 - 1000 gpm	Transported 6" trash pump to station 1 for bypass	Corrective Maintenance	Eric Sutton	Eric Bill Jodi Dave on site for bypass operation	completed
11/9/2018	8304	Portable Diesel Pump 4A Thompson 4" 600 - 700gpm	Topped off gas in trash pump at station D due to possible weather	Corrective Maintenance	Eric Sutton	Eric on site. Topped off gas in pump 15 gal due to possible weather, and checked oil level	completed
7/5/2018	7606	МН 20979	Manhole banging	Corrective Maintenance	David Wilson	DW/CP/MA installed rappo ring, could not use due to cover height/shallow over, 3/4" with 1/2" rappo ring made cover sit too high, removed rappo ring and filled cracks of cover with sand, ran over cover 4 times and no longer banging	completed
4/11/2018	7065	MH 20950	Manhole Inspection	Inspections	Bill Boornazian	Depth to invert 61 inches. MH in OK condition.	completed
4/11/2018	7064	MH 20949	Manhole Inspection	Inspections	Bill Boornazian	Got depth to invert 66". MH is in poor condition and unclear pipe flow at downstream invert. Photos sent to Peter Lyons.	completed
4/20/2018	7081	MH 20945	Cleaned manhole due to observations while at SSO had nothing to with SSO	Corrective Maintenance	Eric Sutton	While in area of SSO checking manholes on Meade ave observed another manhole we could clean while vactor truck on site	completed
6/2/2017	4960	MH 20933	CCTV MH 20933 with Ted Berry	Corrective Maintenance	Eric Sutton	Eventually cameraed cleanout from house to street found damaged 4` line 12 ft from house. installed new 4` PVC pipe 10 footer to lateral	completed
10/10/2017	5756	MH 20888	Backup call checked MH heavy debris	Corrective Maintenance	Eric Sutton	Windriver on site this is part on line cleaning on Atherton, Berkley, PARK AVE	completed
1/18/2018	6378	MH 20887	Jetted and vaccumed from MH next to RiNato Bistro	Corrective Maintenance	Outside Contractor	Windriver jet from MH towards RiNato Bistro only could get apx 15 feet in. Jetted downstream towards MH 20884 100+ feet.	completed
10/10/2017	5757	MH 20887	Backup call checked MH heavy debris	Corrective Maintenance	Eric Sutton	Windriver on site this part of Aterton Berkley andPark ave line cleaning	completed
10/10/2017	5755	MH 20878	Backup call checked MH heavy debris	Corrective Maintenance	Eric Sutton	Windriver on site for the day, this is part of Berkley, Atherton, and Park ave line cleaning	completed
10/10/2017	5754	MH 20877	Backup call checked MH heavy debris	Corrective Maintenance	Eric Sutton	Area complete , Windriver on site for the day this is part of cleaning lines on Berkley, Atherton and Park ave	completed
10/15/2018	8127	MH 20826	Camera line, find service connection to verify excavation	Corrective Maintenance	Eric Sutton	Eric Jim Bill on site, opened MH camera line 90` observed connection, verified by dye test property. Marked location In street	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
10/24/2018	8146	МН 20816	Inspection of cover	Corrective Maintenance	Eric Sutton	Eric on site. Inspection of cover due to possible damage. At site no damage, Homeowner Diane Johnston 25 Orleans ave believes water is seeping from MH 20816 low pressure force main. Advised her we will further investigate structure after I spoke with managers Aram, Bill and we would let her know the outcome	completed
6/15/2018	7439	MH 20811	Install data logger with Ron from evoqua	Corrective Maintenance	Eric Sutton	Eric Ron from evoqua at location, coned street, opened MH installeddata logger	completed
8/22/2018	7788	MH 20811	Evoqua on site doing liquid and data logger samples	Corrective Maintenance	Eric Sutton	Eric Ron at water st and nantasket ave. Opened MH 20811 replaced data logger, then liquid samples interceptor while pump was on at station 3 PH 7.6, nitrate 20 ppm,	completed
2/12/2018	6669	MH 20773	Broken manhole cover. 23.5 inches diameter.	Corrective Maintenance	David Wilson	While checking flow in the street for 11 Mayflower, sand filled in space between frame and manhole cover. Using a sledgehammer to break free the manhole cover, a portion of the manhole cover broke off. All pieces were reinstalled with a tall warning cone and sandbags were placed on top of manhole cover.	completed
2/12/2018	6669	MH 20773	Broken manhole cover. 23.5 inches diameter.	Corrective Maintenance	Outside Contractor	BB brought HUB construction a new 26" frame and cover. HUB dug and replaced frame and cover.	completed
5/22/2018	7265	MH 20674	Broken MH cover 27 Westminster rd	Corrective Maintenance	Eric Sutton	Eric Dave replaced broken manhole cover with new	completed
12/27/2018	8517	MH 20626	Broken manhole cover at the intersection of Kenberma and Samoset.	Corrective Maintenance	David Wilson	Replaced manhole cover.	completed
9/21/2018	7984	МН 20600	IN- PIPE unit # 3 failure	Corrective Maintenance	Eric Sutton	Eric Cody on site. During bacteria refill observed unit not properly functioning. Field troubleshooting performed, (ei battery change, checking terminal connections) one fix is keeping unit in a dry place for a day, if still not functioning usually a new circuit board is necessary that start process is being performed. However we have a replacement unit on site which I assemble. Eric Cody installed new unit until repairs are completed.	completed
9/21/2018	7984	MH 20600	IN- PIPE unit # 3 failure	Corrective Maintenance	Eric Sutton	Bulk Status Update	completed
10/19/2018	8142	MH 20600	Replaced MH cover due to damaged	Corrective Maintenance	Eric Sutton	Eric Jodi replaced MH cover	completed
2/26/2018	6711	MH 20552	Truax contractor broke MH 20552	Corrective Maintenance	Eric Sutton	Eric Dave went to location with 26" cover to replace broken cover, however replacment cover was to thick which putruded surface of street, so we left cover there for a bit. Went to MH 20833 dump access road stole that cover because it was the correct thickness, brought back to MH 20552 and swapped out. The thick cover is at dump access rd it does putrude street but no traffic.	completed
10/1/2018	8105	MH 20552	Noisy MH cover	Corrective Maintenance	Eric Sutton	Eric Jim on site installed rappo ring	completed
4/6/2018	7054	MH 20522	Noisy manhole cover installed rappo ring	Corrective Maintenance	Eric Sutton	Eric Cody at Packard & Nantasket ave MH 20552, installed rappo ring reinstalled cover.	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
1/19/2018	6388	МН 20420	Manhole needs to be raised couple inches, and reset. Street is disaraid	Corrective Maintenance	Eric Sutton	Eric Jacen opened MH, observed rim has been shifted 4" over time ,over the years .However street was tarred, both rim & cover and structure in sound condition. MH needs to be raised couple inches and reset back to street level. Street needs repair due to weather, plows etc.	completed
1/19/2018	6388	MH 20420	Manhole needs to be raised couple inches, and reset. Street is disaraid	Corrective Maintenance	Eric Sutton	aqua line on site repairing MH cover and rim. excaveted exsisting rim and cover, replaced with new rim and cover. asfaulted perimiter	completed
7/16/2018	7615	MH 20357	Install rappo ring due to banging MH	Corrective Maintenance	Eric Sutton	Eric Mike at location removed cover installed rappo ring all quiet on N st	completed
8/20/2018	7790	MH 20324	Banging manhole cover reported from 36 R street.	Corrective Maintenance	David Wilson	DE/JG Installed wrap o-ring. Verified cover no longer makes noise. Customer came out to thank us for fixing the manhole and our quick response time.	completed
1/9/2018	6355	МН 20299	Broken rim 50%	Corrective Maintenance	Eric Sutton	Eric Dave responding to noisy cover observed rim broken 50% need Hub construction to repair (high priority) Q st and Natasket Ave	completed
1/9/2018	6355	МН 20299	Broken rim 50%	Corrective Maintenance	David Wilson	Customer called in about a banging manhole at the intersection of Q street and Nantasket Ave. We tried installing a wrap o-ring under the cover since cold pack was filled in the missing frame area. Noise was louder and the cover moved more than before. Removed wrap o-ring and tried to shim the cover with packing material. Recommendation is that the frame gets replaced.	completed
1/9/2018	6355	мн 20299	Broken rim 50%	Corrective Maintenance	Eric Sutton	aqua line on site for the day, repairing broken MH rims and covers. excavated exsiting cover and rim, replaced with new rim and cover. asfaulted perimiter	completed
5/5/2018	7219	MH 20290	L Street manhole by playground - inspect	Corrective Maintenance	Aram Varjarbedian	Inspect for normal flow. Flowing ok.	completed
5/10/2018	7231	МН 20290	Confined space entry install plug	Corrective Maintenance	Eric Sutton	Aram Dave Eric on site. Emergency rescue notified, Aram entered MH installed plug, Dave being the attendant. Truax CCTV, Vactor on site. ESI pumping upstream to maintain flow, W/C on site for support. Maybe enter again to get plug out.	completed
7/30/2018	7634	MH 20273	Noisy manhole cover Nantasket and Tst	Corrective Maintenance	Eric Sutton	Eric Mike on site, opened cover installed rappo ring, installed cover now silent	completed
5/10/2018	7232	MH 20250	ESI on site for support	Corrective Maintenance	Eric Sutton	Esi on site at MH 20250 upstream maintaining flow and discharging at MH 20373. At normal flow it taking 3 to 4 hrs to reach a 6000 gal discharge	completed
4/3/2018	7049	MH 20245	Damaged rim repair high priority	Inspections	Eric Sutton	Eric Jim responding to noisy MH cover at 842 nantasket ave observed rim broken just less than half, installed rappo ring now quiet. Should have DPW cold patch area until road repair starts in the summer	completed
7/2/2018	7603	MH 20245	Manhole Inspection	Corrective Maintenance	David Wilson	DW/MA inspected manhole. Approximately 40% of the frame is broken off. Installed new wrap o-ring. Spoke to customer that filed the complaint. She was very happy with our quick response.	completed

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8/30/2018	7807	MH 20240	Add wrap o ring due to noisy manhole	Corrective Maintenance	Eric Sutton	Banging manhole, eric and cody onsite, installed wrap o ring, manhole now quiet	completed
1/16/2018	6374	MH 20227	Observed damaged MH rim 25%	Corrective Maintenance	Eric Sutton	Eric Dave on site (O st & Central) to silence MH cover, observed damaged rim 25%. Need to replace rim (high priority) unsafe, Need to reach out to Hub construction	completed
5/30/2018	7284	MH 20227	2nd W/O for this, broken rim	Inspections	Eric Sutton	During in pipe work, observed rim broken, this has been broken since the winter, after a plow hit MH, during storms this has been problematic, being dislodged. Writing this W/O to refresh issue, before winter arrives.	completed
5/30/2018	7284	MH 20227	2nd W/O for this, broken rim	Inspections	Eric Sutton	aqua line on site for the day repairing MH s . excavated exsisting rim and cover, replaced with new rim and cover. also new asfault around perimiter	completed
3/11/2018	6864	MH 20222	Manhole Inspection	Inspections	David Wilson	Closest manhole #20222 was under water and sealed. Storm drain at intersection surcharged and flooding street. MH 20225 and MH 20243 flowing freely. Followed up 3/11/18 streets are dry.	completed
11/15/2017	6030	MH 20178	Bacteria unit # 6 failed	Corrective Maintenance	Eric Sutton	trouble shooted unit by replacing batteries unit now operational	completed
6/2/2017	4961	MH 20154	CCTV MH 20154 with Ted Berry	Corrective Maintenance	Eric Sutton	W/C Eric Bill John Struzziery Contractor Ted Berry on site . Dug partial of street on to property into garage repaired line with 4`PVC all complete	completed
6/22/2018	7453	MH 20129	Banging MH cover	Corrective Maintenance	Eric Sutton	New rappo ring for MH 20129, 1049 Nantasket ave. CP & MA assisted ES	completed
9/12/2018	7963	MH 20128	Respond to noisy MH cover	Corrective Maintenance	Eric Sutton	Eric Dave on site. Repetitive noisy MH due to wrong size, recently recieved new inventory of covers and rims, now applied new cover to MH and rappo ring. Shouldn't here that one again	completed
8/28/2018	7796	MH 20125	Noisy MH cover	Corrective Maintenance	Eric Sutton	Eric Mike installed rappo ring	completed
3/3/2018	6829	MH 20114	Broken chimney from dozer scrapping street	Emergency Repair	Eric Sutton	Eric,Rob,Ray on site observed dozer fixing berm/ spillway in front of 1139 property , dozer took rim cover and damaged chimney of MH. We then placed rim, cover, back on temporarily, also put sand bags over damaged area. John S to be notified.	completed
3/3/2018	6829	MH 20114	Broken chimney from dozer scrapping street	Emergency Repair	Eric Sutton	Aqua line repaired MH	completed
7/16/2018	7617	MH 20113	IN-PIPE BACTERIA UNIT 4	Corrective Maintenance	Eric Sutton	Eric Mike on site, this unit had circuit board a issue, due to the wire sautered to the board broke off, we did tape back together to make operational. Within that 2 week time a new circuit board arrived after speaking to our contact, a new board has bin installed now operational to spec	completed
7/16/2018	7616	MH 20113	Observed damaged MH rim, possible for Aqua line to repair	Corrective Maintenance	Eric Sutton	During installing Bi weekly IN-PIPE bacteria observed damaged rim which had happened recently. We visit MH every two weeks and this had just happened within the last two weeks. Aslo paving at perimeter was a issue anyway now area needs repair.	completed
7/16/2018	7616	MH 20113	Observed damaged MH rim, possible for Aqua line to repair	Corrective Maintenance	Eric Sutton	aqua line on site repaired area	completed

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9/11/2018	7959	MH 20082	Opened MH 20082 for investigation of 4 Farina rd	Corrective Maintenance	Eric Sutton	Eric opened MH 20082 for investigation purposes to see if GIS map and actual MH coexist with each other and to locate another MH 20087 which is possible in woods unable to locate in woods st this time. Suggestion is to camera upstream MH and see if the downstream MH exists	completed
3/29/2017	4303	MH 20065	Manhole Inspection	Inspections	Eric Sutton		completed
7/30/2018	7635	MH 20057	11 Harborview rd check manhole for flow due to reoccurring issues at property.	Corrective Maintenance	Eric Sutton	Eric Mike on site, homeowner reached out to John S about issue at property, he ask us to check street. Street flowing freely. Also back in May was our original call out, which we cameraed street to verify service connection was operational, service was fine. Hub had done some water line work and both water and sewer only couple feet apart	completed
5/29/2018	7282	Manholes	Q st & Nantasket manhole loud, new complaint today	Corrective Maintenance	Jim Gagliard	Dave & I Tried rapo ring, just made it worse, rim & structure broken.	completed
5/29/2018	7282	Manholes	Q st & Nantasket manhole loud, new complaint today	Corrective Maintenance	Jim Gagliard	New frame and cover installed, rattling issue resolved	completed
4/27/2018	7107	Grinder Pump 97 ROCKAWAY AVE.	Install new pump due to remodel house and new cover.	Corrective Maintenance	Eric Sutton	10am to 11am Eric Cody installed new grinder and cover Pat Cannon (electrician) will finish electrical in box house was remodeled	completed
4/27/2018	7224	Grinder Pump 97 ROCKAWAY AVE.	Install new pump due to remodel house and new cover.	Corrective Maintenance	Eric Sutton	10am to 11am Eric Cody installed new grinder and cover Pat Cannon (electrician) will finish electrical in box house was remodeled	completed
5/8/2018	7225	Grinder Pump 97 ROCKAWAY AVE.	Replaced grinder pump for the 2nd time	Corrective Maintenance	Eric Sutton	Eric Dave replaced pump now operational. However observed damaged pump, somebody tampered with pump see pics	completed
9/30/2018	7996	Grinder Pump 97 NO. TRURO ST.	High alarm going off.	Corrective Maintenance	Aram Varjarbedian	Pump nor running. In deep chamber. Disch valve lever not in fact, therefore had to use step ladder to get in to reattach and open valve.	completed
10/10/2018	8124	Grinder Pump 97 NO. TRURO ST.	Valve hardware and canister cover replacement.	Corrective Maintenance	David Wilson	Isolated pump and climbed into cannister. Installed isolation valve handle and missing nylock nut. Locked in pump assembly and installed cover. Upper frame damage did not allow installation of cover. Tried to make fit and the damaged part of the frame fell off. Upper frame should be replaced.	completed
10/18/2018	8138	Grinder Pump 97 NO. TRURO ST.	Upper frame replacement	Corrective Maintenance	David Wilson	DW/ES electrically isolated and verified pump connection. Disassembled connectors and swapped out upper frame. Reassembled connectors and verified operation.	completed
8/15/2018	7777	Grinder Pump 96 SALISBURY ST.	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Dave on site replicated issue faulty float switch loto performed replace griner	completed
3/12/2018	6869	Grinder Pump 94 SALISBURY ST.	Service call grinder not working	Corrective Maintenance	Bill Boornazian	Found grinder can full no leakage on to ground. Pumped out top of can to tote on truck. Found grinder panel had no power. Home owner checked house panel and found breaker tripped. Reset at outside panel. Tested and watched alarm clear. No pump replacement needed. Operations restored. BB, ES, DW	completed

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2/23/2018	6702	Grinder Pump 9 SHORE GARDENS RD.	Grinder chamber full and spillage	Corrective Maintenance	Joe Basler	Assisted by B.A. found control panel vandalized and breakers off. No alarm, no power. Chk power and able to run pump ok, but alarm sounding. Call Pat Cannon, and he replied control card and light. Test ok, advise homeowner.	completed
2/27/2018	6715	Grinder Pump 9 SHORE GARDENS RD.	Grinder in and out of alarm	Corrective Maintenance	Eric Sutton	12pm to 100pm Eric Dave Brett replaced grinder pump LOTO PERFORMED	completed
1/3/2018	6349	Grinder Pump 61 WYOLA ROAD	Grinder in alarm due to low flow during water usage	Corrective Maintenance	Eric Sutton	900am 1000am LOTO PERFORMED Eric Dave replaced grinder	completed
1/3/2018	6348	Grinder Pump 61 WYOLA ROAD	Alarm box has no light or alarm operation	Corrective Maintenance	Eric Sutton	Eric Dave on site observed alarm box has no light or sound during alarm mode need electrician to repair	completed
9/22/2018	7985	Grinder Pump 56 SALISBURY ST.	Grinder Pump in alarm	Corrective Maintenance	Joe Basler	Dw recieved callout @ 9 pm for grinder pump in alarm @ 56 Salisbury st, JB and CP (A-Team) out to replace pump @ 8 am, grinder can pumped down and pump replaced w/ rebuilt £1 grinder *DoForms not allowing me to edit arrival or departure time	completed
11/12/2018	8309	Grinder Pump 5 ELM AVE	11/10/18 - 345pm. Grinder in alarm, and sewage backing up into toilet	Corrective Maintenance	Aram Varjarbedian	11/10,/18 Tennant called dispatch center. Their apt 5B is lowest in the house. AV & JB responded and replaced pump with rebuilt pump.	completed
3/5/2018	6839	Grinder Pump 37 ELM AVE	Customer states grinder pump is in alarm.	Corrective Maintenance	David Wilson	DW/JS Verified alarm. Replaced grinder pump and verified proper working condition.	completed
11/1/2017	5953	Grinder Pump 37 ELM AVE	Grinder in alarm	Corrective Maintenance	Eric Sutton	Pat Cannon on site, repaired housing on plugs	completed
9/27/2018	7993	Grinder Pump 37 ELM AVE	Pump constantly cycling and excessive noise.	Inspections	David Wilson	Verified concerns. Two tears in side of canister allowing ground water to run in. Pump cyxles approximately every twn minutes and is loud.	completed
6/30/2018	7466	Grinder Pump 35 RICHARDS ROAD	Replace Grinder Pump	Corrective Maintenance		Resident shut off breaker, no alarm on arrival, turned on breaker, alarm sounded, shut breaker off at grinder box, opened can, can was full of water, pumped water out of can, removed old grinder pump, installed new grinder pump, upon installation noticed a slight leak at top of tank, notified aram, duct tape applied to cracks to slow down the leaking water, Dave will follow up sunday to assess situation	completed
3/7/2018	6851	Grinder Pump 35 NO. TRURO ST.	Replaced grinder pump in alarm	Corrective Maintenance	Bill Boornazian	Grinder in alarm BB RS and JB responded. Had to pump out grinder pit. Installed new grinder pump. Used adapter harness. Could have electrician replace harness to new style and take adapter back to plant.	completed
3/4/2018	6835	Grinder Pump 32 ROCKAWAY AVE.	Grinder in alarm BB inspection and recommend replacing	Corrective Maintenance	Bill Boornazian	BB found grinder in alarm and silenced pump not running. Through breakers off and back on and pump started. It shut itself off after 20 minutestoo long. Stayed in alarm the whole time. Left breakers on and alarm light never shut off. Recommend replacing and inspection of wiring harness and possibly box if new pump does not clear alarm light.	completed

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3/4/2018	6835	Grinder Pump 32 ROCKAWAY AVE.	Grinder in alarm BB inspection and recommend replacing	Corrective Maintenance	Jody St. George	3/5/18 - Jody St. George and Dave Wilson removed grinder (serial # 91529) and replaced with grinder (serial #102825). Problem with alarm still existed - suspected control board was the issue - called Pat Cannon who came in and replaced. System now operating correctly - Problem resolved.	completed
1/1/2018	6345	Grinder Pump 32 RICHARDS ROAD	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Dave on site, LOTO performed. When closing valve, stem on valve broke flush not making pump operational even if pump was replaced. Notified Aram he spoke to FR Mahoney tech nothing we could do today advised homeowner to limit water use, W/C will convene tomorrow and access issue and come up with a plan.	completed
1/1/2018	6345	Grinder Pump 32 RICHARDS ROAD	Grinder in alarm	Corrective Maintenance	Eric Sutton		completed
1/1/2018	6345	Grinder Pump 32 RICHARDS ROAD	Grinder in alarm	Corrective Maintenance	Eric Sutton		completed
1/1/2018	6345	Grinder Pump 32 RICHARDS ROAD	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Dave arrived at location, met operator from Rosnano Davis who used to work for FR MAHONEY who knew who to repair valve. Obsered and helped with task and completed work	completed
3/6/2018	6842	Grinder Pump 32 RICHARDS ROAD	Grinder pump replaced and Glenn replaced wiring harness to new style	Corrective Maintenance	Bill Boornazian	JG & BB replaced grinder pump with new pump. Glenn fellows electric upgraded wiring harness from house side to fit new style.	completed
1/13/2018	6381	Grinder Pump 30 POND STREET	High level well alarm on	Corrective Maintenance		Went to observe, pump running. Resident advised to allow water from recent rain storm to recede. Contact if alarm stays on or goes out. Follow up woth sewer department on Monday on cause.	completed
1/18/2018	6377	Grinder Pump 30 POND STREET	Inspected lower part of can for I/I	Corrective Maintenance	Bill Boornazian	Known issue with this grinder pump going into high alarm during wet weather. Pulled Pump used Windriver vactor to pump out lower pit. Used GoPro camera to inspect grinder can and found continuos groundwater flow around the house service side PVC / boot connection. Also need to replace electric connection do to crack in plastic connection.	completed
7/11/2018	7612	Grinder Pump 30 NO. TRURO ST.	Broken cover causing grinder pump to vent to atmosphere.	Corrective Maintenance	David Wilson	Uninstalled old cover and installed new cover.	completed
3/15/2018	6876	Grinder Pump 3 DELLAWANDA RD.	Customer states that her grinder pump was in alarm. Verified fault and showed customer how to silence the alarm.	Corrective Maintenance	David Wilson	DW/JB electrically isolated failed pump. Uninstalled old pumps nd installed a remanufactured unit. Verified proper operation.	completed
8/12/2018	7772	Grinder Pump 25 ELM AVE	Grinder pump in alarm, intermittently operational	Corrective Maintenance		Alarm verified, electrically isolated, removed old pump, new pump installed, installed new style connector	completed
5/12/2018	7238	Grinder Pump 218 NO. TRURO ST.	Grinder in high alarm	Corrective Maintenance	Aram Varjarbedian	Assisted by Dave, pumped down excess to tote, and replace pump with rebuilt spare.	completed
6/24/2018	7457	Grinder Pump 195 NO. TRURO ST.	Grinder in alarm	Corrective Maintenance	Eric Sutton	10:15 to11:45 Eric Dave on site LOTO PERFORMED had to pump out can into tote due to excess charge, removed old pump installed new pump	completed

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9/20/2018	7983	Grinder Pump 19 WYOLA ROAD	Grinder pump in alarm.	Corrective Maintenance	David Wilson	Verified pump to be town owned. Verified alarm. Check liquid level in can. Informed customer to limit water use and would follow up following morning to correct problem.	completed
12/28/2018	8518	Grinder Pump 170 NO. TRURO ST.	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Jodi on site, LOTO PERFORMED replaced grinder now operational	completed
2/27/2018	6714	Grinder Pump 15 LOGAN AVE. (ALSADA)	Grinder is in alarm.	Corrective Maintenance	David Wilson	DW/ES/BA Verified alarm, isolated electrical, replaced pump, installed new cover and verified proper operation.	completed
7/30/2018	7636	Grinder Pump 12 ROCKAWAY AVE.	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Dave on site, Rosano Davis on site due to SSO see details. Rosano pumped entire grinder can which was dirty with grease, rags, plastic shampoo caps. Replaced grinder now operational. Also applied lime on effected area	completed
6/19/2018	7442	Grinder Pump 11 RICHARDS ROAD	Grinder in alarm	Corrective Maintenance	Eric Sutton	Eric Mike at location, alarm is off, homeowner on site, he said grinder was in alarm for about 15 min after doing a load of laundry, which he said hasn't happened before. We checked pump it was operational told homeowner if it happens again to call and we would replace pump	completed
5/24/2018	7266	Grinder Pump 104 NO. TRURO ST.	Pump in alarm	Corrective Maintenance	Eric Sutton	Eric Dave LOTO performed removed old grinder replacedwith new	completed
2/5/2018	6319	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson	Dispatched To 6498798790	completed
2/5/2018	6319	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson	·	completed
5/7/2018	6800	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
6/4/2018	7011	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
7/2/2018	7179	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
8/6/2018	7370	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections			completed
9/3/2018	7570	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
10/1/2018	7716	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
11/5/2018	7893	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
12/3/2018	8070	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	David Wilson		completed
1/7/2019	8637	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspections	SEMS TABLET #2	Dispatched To 2079561647	completed
4/10/2018	7059	Ferric Chloride Pump	Repair broken chem lines & conduit	Corrective Maintenance	Jody St. George	Repair complete	completed
3/7/2018	6848	DPW Support	Investigative work at Ocean Ave. And Main Street Storm water system for John S.	Inspections	Aram Varjarbedian	Investigative work in the storm water system with hopes of draining the flooded marsh. Assistance provided by Rob Scott (4hrs). Also support services with hoses, pumps, and personnel (AV,BB,DW - collective 3 hrs).	completed
7/17/2018	7613	DPW Support	Camera catch basin from Milford st to discharge at the bay 230`	Corrective Maintenance	Eric Sutton	Eric Cody John Struzziey on site, along with 2 crew from DPW with jet truck, sent jet down line, attached 300` rope to jet line pulled back then attached rope to camera line, then hand pulled camera twice thru drain pipe. Besides a 50' dip on line, pipe in good condition. Started 730am departed 940am	completed
8/3/2018	7760	DPW Support	11 Harborview service replacement	Corrective Maintenance		Coordinated work, oversaw contractor and used camera multiple times to make the best use of contractor time replacing pipe.	completed

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8/18/2018	7781	DPW Support	Pump station D and the Hull stormwater system	Inspections	Eric Sutton	During pump station inspections Eric noticed a very strong odor of fuel at pump station D. He immediately called the plant and dispatched Rob S. and Jim G. For support. Upon their arrival it was quickly evident that something had been introduced to the stormwater system. John S. and the DPW were notified immediately. Fire Department, Police Department, and the DEP were also notified. WWTF assisted throughout the day providing any requested support and performed an intensive storm water system inspection/investigation. The point of introduction to the stormwater system was located, critical areas boomed, and the Emergency Response Team made the necessary precautionary measures to protect the Bay area at the bottom of D Street.	completed
9/7/2018	7929	DPW Support	4 farina rd, install temporary MH cover on property	Corrective Maintenance	Eric Sutton	11:00am Eric Bill on site. Installed temporary MH cover (29.5 diameter) due to removal of overgrowth, in which a bobcat damaged existing cover. Replaced with 26" 3/4 plywood and sand bags. Further investigation of area is needed. Will discuss with mgmt and come up with plan	completed
9/14/2018	7974	DPW Support	Install rappo ring on drain MH cover outside the plant	Corrective Maintenance	Eric Sutton	Eric Bill on site, at intersection on nantasket and main . Eric observed noisy MH cover we installed rappo ring	completed
10/1/2018	8104	DPW Support	105 Edgewater road / camera catch basin to the bay 85`	Corrective Maintenance	Eric Sutton	9:45 to 11:45 Eric Jim on site. Assisted DPW on visional support by cameraing line after jet work done by DPW.	completed
1/3/2018	6350	Dig Safe Requests	34 Westminster water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
1/3/2018	6350	Dig Safe Requests	34 Westminster water repair	Inspections	David Wilson	Marked Dig Safe	completed
1/25/2018	6398	Dig Safe Requests	843 Nantasket ave emergency water Irepair	Inspections	Eric Sutton	Marked Dig Safe	completed
1/31/2018	6535	Dig Safe Requests	169 samoset ave emergency gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
1/31/2018	6536	Dig Safe Requests	587 Nantasket ave Boston gas install service	Inspections	Eric Sutton	Marked Dig Safe	completed
2/6/2018	6649	Dig Safe Requests	78 Atlantic ave water gate repair	Inspections	Eric Sutton	Marked Dig Safe	completed
2/6/2018	6649	Dig Safe Requests	78 Atlantic ave water gate repair	Inspections	Bill Boornazian	Marked Dig Safe	completed
2/6/2018	6650	Dig Safe Requests	60 N st water box repair	Inspections	Eric Sutton	Marked Dig Safe	completed
2/8/2018	6656	Dig Safe Requests	61 barnstable repair water leak	Inspections	Eric Sutton	Marked Dig Safe	completed
2/8/2018	6656	Dig Safe Requests	61 barnstable repair water leak	Inspections	David Wilson	Marked Dig Safe	completed
2/8/2018	6657	Dig Safe Requests	11 Bradford ave water box repair	Inspections	David Wilson	Marked Dig Safe	completed
2/8/2018	6657	Dig Safe Requests	11 Bradford ave water box repair	Inspections	Eric Sutton	Marked Dig Safe	completed
2/21/2018	6691	Dig Safe Requests	68 draper ave	Inspections	Eric Sutton	Marked Dig Safe	completed
2/21/2018	6691	Dig Safe Requests	68 draper ave	Inspections	Bill Boornazian	Marked Dig Safe	completed
2/22/2018	6695	Dig Safe Requests	5 Phipps st catch basin repair	Inspections	Eric Sutton	Marked Dig Safe	completed
3/9/2018	6857	Dig Safe Requests	1 Mildred st emergency gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
3/27/2018	6909	Dig Safe Requests	144 Samoset Ave gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
4/24/2018 4/28/2018	7091 7105	Dig Safe Requests Dig Safe Requests	101 highland ave gas repair Two digsafe markouts. Emerg water repairs 11 Harborview & 21 Helen.	Inspections	Eric Sutton	Marked Dig Safe Marked Dig Safe	completed completed
5/1/2018	7210	Dig Safe Requests	40 G st gas meter repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/2/2018	7211	Dig Safe Requests	127 Edgewater rd gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/9/2018	7226	Dig Safe Requests	373 Newport rd water leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/9/2018	7226	Dig Safe Requests	373 Newport rd water leak repair	Inspections	David Wilson	Marked Dig Safe	completed
5/11/2018	7236	Dig Safe Requests	36 highland ave gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
5/15/2018	7241	Dig Safe Requests	S st to Y st on Nantasket ave gas line	Inspections	Eric Sutton	Marked Dig Safe	completed
5/16/2018	7243	Dig Safe Requests	110 Cadish ave gas leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/16/2018	7246	Dig Safe Requests	5 dig safes V st to T st Cadish ave gas service install	Inspections	Eric Sutton	Marked Dig Safe	completed
5/17/2018	7249	Dig Safe Requests	Cadish ave, T st, NAN ave, Ust. 12 dig safes gas line project	Inspections	Eric Sutton	Marked Dig Safe	completed
5/18/2018	7251	Dig Safe Requests	U st 7 dig safes gas project	Inspections	Eric Sutton	Marked Dig Safe	completed
5/25/2018	7267	Dig Safe Requests	50 H st water service	Inspections	Eric Sutton	Marked Dig Safe	completed
5/25/2018	7267	Dig Safe Requests	50 H st water service	Inspections	Bill Boornazian	Marked Dig Safe	completed
5/25/2018	7268	Dig Safe Requests	6 James ave gas leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/25/2018	7269	Dig Safe Requests	112 Cadishave gas leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/25/2018	7270	Dig Safe Requests	4 beach ave & U st dig safes gas line project	Inspections	Eric Sutton	Marked Dig Safe	completed
5/25/2018	7271	Dig Safe Requests	3 dig safes beaconto Bradfordave gas project	Inspections	Eric Sutton	Marked Dig Safe	completed
5/29/2018	7279	Dig Safe Requests	191 Samoset Ave trench for gas generator	Inspections	Eric Sutton	Marked Dig Safe	completed
5/29/2018	7279	Dig Safe Requests	191 Samoset Ave trench for gas generator	Inspections	Eric Sutton	Marked Dig Safe	completed
5/30/2018	7286	Dig Safe Requests	24 ,25 manomet ave water leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
5/31/2018	7288	Dig Safe Requests	19 Burn Rd	Inspections	Bill Boornazian	Marked Dig Safe	completed
6/4/2018	7400	Dig Safe Requests	84 Edgewaterrd tree stump removal	Inspections	Eric Sutton	Marked Dig Safe	completed
6/4/2018	7400	Dig Safe Requests	84 Edgewaterrd tree stump removal	Inspections	David Wilson	Marked Dig Safe	completed
6/4/2018	7401	Dig Safe Requests	119 Nantasket Rd tree stump removal	Inspections	Eric Sutton	Marked Dig Safe	completed
6/4/2018	7401	Dig Safe Requests	119 Nantasket Rd tree stump removal	Inspections	David Wilson	Marked Dig Safe	completed
6/4/2018	7402	Dig Safe Requests	110 draper ave drain repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/5/2018	7405	Dig Safe Requests	130 Cadish ave water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/5/2018	7408	Dig Safe Requests	18 b st gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/5/2018	7407	Dig Safe Requests	157 Kingsley Rd gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/5/2018	7409	Dig Safe Requests	188 samoset ave	Inspections	Eric Sutton	Marked Dig Safe	completed
6/7/2018	7410	Dig Safe Requests	133 manomet ave gas relocation	Inspections	Eric Sutton	Marked Dig Safe	completed
6/7/2018	7411	Dig Safe Requests	44 Andrew ave, Water Repair, Trench in yard	Inspections	Eric Sutton	Marked Dig Safe	completed
6/7/2018	7412	Dig Safe Requests	2 Massasoit Ave, install ug electrical, widen driveway	Inspections	Eric Sutton	Marked Dig Safe	completed
6/8/2018	7413	Dig Safe Requests	5 X st gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/8/2018	7414	Dig Safe Requests	14 H st gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/8/2018	7417	Dig Safe Requests	8 Front st water break on st	Inspections	Eric Sutton	Marked Dig Safe	completed
6/8/2018	7416	Dig Safe Requests	6 front st water break on st	Inspections	Eric Sutton	Marked Dig Safe	completed
6/12/2018	7428	Dig Safe Requests	42 valley beach rd excavation of drain valve at station A	Inspections	Eric Sutton	Marked Dig Safe	completed
6/12/2018	7429	Dig Safe Requests	73 F st gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/13/2018	7430	Dig Safe Requests	24 Halvorsen gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/13/2018	7431	Dig Safe Requests	144 draper ave gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
6/13/2018	7433	Dig Safe Requests	14 D`S @ Y st, Tierney, bay ave east, PT Allerton gas project	Inspections	Eric Sutton	Marked Dig Safe	completed
6/13/2018	7433	Dig Safe Requests	14 D`S @ Y st, Tierney, bay ave east, PT Allerton gas project	Inspections	David Wilson	Marked Dig Safe	completed
6/19/2018	7443	Dig Safe Requests	All Alsada & Logan ave water main excavation. All low pressure force main. 13 Ds	Inspections	Eric Sutton	Marked Dig Safe	completed
6/19/2018	7444	Dig Safe Requests	42 duck lane gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/1/2018	7752	Dig Safe Requests	18 logan ave, gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/9/2018	7766	Dig Safe Requests	Intersection @ Lewis/ Samoset ave. Gate box repair, 4 dig safes	Inspections	Eric Sutton	Marked Dig Safe	completed
8/9/2018	7767	Dig Safe Requests	Adam's st/Samoset ave gate box repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/10/2018	7768	Dig Safe Requests	42 Ocean ave catch basin repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/10/2018	7769	Dig Safe Requests	78 kenberma st drain line repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/15/2018	7778	Dig Safe Requests	82 Atlantic - abandoned gas service	Inspections	Eric Sutton	Marked Dig Safe	completed
8/16/2018	7779	Dig Safe Requests	43 Roosevelt, Gas Repair,	Inspections		Marked Dig Safe	completed
8/16/2018	7780	Dig Safe Requests	13 Sagamore Terr, catchbasin install,	Inspections		Marked Dig Safe	completed
8/24/2018	7794	Dig Safe Requests	24 Sunset ave railing repair	Inspections	Eric Sutton	Marked Dig Safe	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
8/28/2018	7797	Dig Safe Requests	100 Nantasket ave water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/29/2018	7800	Dig Safe Requests	11 Rockland circle new gas service	Inspections	Eric Sutton	Marked Dig Safe	completed
8/29/2018	7801	Dig Safe Requests	Moreland/Bay st gate box repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/29/2018	7802	Dig Safe Requests	3 second st gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
8/29/2018	7803	Dig Safe Requests	42 Duck Ln, New Gas Service	Inspections	Eric Sutton	Marked Dig Safe	completed
8/29/2018	7804	Dig Safe Requests	62 Holbrook Ave, Install New Service	Inspections	Eric Sutton	Marked Dig Safe	completed
8/30/2018	7806	Dig Safe Requests	Valley Beach Road, drain basin repair	Inspections	Eric Sutton	Marked Dig Safe	completed
9/5/2018	7926	Dig Safe Requests	3 Arthur Ave, Gas service	Inspections	Eric Sutton	Marked Dig Safe	completed
9/12/2018	7964	Dig Safe Requests	47 manomet ave water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
9/28/2018	7994	Dig Safe Requests	36 Cadish Ave, New gas connection	Inspections		Marked Dig Safe	completed
10/1/2018	8106	Dig Safe Requests	15 Channel st water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
10/4/2018	8117	Dig Safe Requests	22 Samoset Ave, Gas repair	Inspections	Joe Basler	Marked Dig Safe	completed
10/16/2018	8130	Dig Safe Requests	20184204377 64 H Street Emergency gas repair.	Inspections	David Wilson	Marked Dig Safe	completed
10/16/2018	8129	Dig Safe Requests	20184201073 22 Samoset Ave	Inspections	David Wilson	Marked Dig Safe	completed
10/16/2018	8128	Dig Safe Requests	Drain pipe repairs	Inspections		Marked Dig Safe	completed
10/18/2018	8136	Dig Safe Requests	110 Samoset ave cap sewer for demo	Inspections	Eric Sutton	Marked Dig Safe	completed
10/18/2018	8139	Dig Safe Requests	330, 331,295, Kingsley Newport rd water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
10/18/2018	8140	Dig Safe Requests	64 h st gas service	Inspections	Eric Sutton	Marked Dig Safe	completed
10/18/2018	8141	Dig Safe Requests	26 ,28 harold place water repair	Inspections	Eric Sutton	Marked Dig Safe	completed
10/23/2018	8144	Dig Safe Requests	31 Bay Ave East, Emergency Gas leak repair	Inspections	Eric Sutton	Marked Dig Safe	completed
10/26/2018	8160	Dig Safe Requests	104 Packard ave water break	Inspections	Eric Sutton	Marked Dig Safe	completed
11/2/2018	8276	Dig Safe Requests	183 North Truro removal of pole	Inspections	Eric Sutton	Marked Dig Safe	completed
11/2/2018	8277	Dig Safe Requests	110 Samoset ave excavation work	Inspections	Eric Sutton	Marked Dig Safe	completed
11/9/2018	8305	Dig Safe Requests	815 nantasket ave, water leak	Inspections	Eric Sutton	Marked Dig Safe	completed
11/19/2018	8323	Dig Safe Requests	166 Cadish ave	Inspections	Eric Sutton	Marked Dig Safe	completed
11/19/2018	8322	Dig Safe Requests	43 Edgewater road gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
11/19/2018	8322	Dig Safe Requests	43 Edgewater road gas repair	Inspections	Eric Sutton	Marked Dig Safe	completed
11/19/2018	8325	Dig Safe Requests	7 Douglas ave catch basin installation	Inspections	Eric Sutton	Marked Dig Safe	completed
11/26/2018	8331	Dig Safe Requests	14 C st catch basin installation	Inspections	Eric Sutton	Marked Dig Safe	completed
11/26/2018	8333	Dig Safe Requests	64&66 Clifton ave water break	Inspections	Eric Sutton	Marked Dig Safe	completed
12/7/2018	8472	Dig Safe Requests	19 kenberma st install catch basin	Inspections	Eric Sutton	Marked Dig Safe	completed
12/7/2018	8474	Dig Safe Requests	49 Edgewater road catch basin installation	Inspections	Eric Sutton	Marked Dig Safe	completed
12/7/2018	8475	Dig Safe Requests	65/ 69 Hst catch basin repairs	Inspections	Eric Sutton	Marked Dig Safe	completed
12/18/2018	8493	Dig Safe Requests	97 Samoset ave catch basin work	Inspections	Eric Sutton	Marked Dig Safe	completed
1/18/2018	6382	23 - WW Pump Stations	Manhole Inspection	Inspections		Checked manholes at stations 1, 3, and 9 when recording salinity data	completed
12/16/2017	6211	23 - WW Pump Stations	Collect floor to ceiling measurements for lower levels at stations 1, 4 and 9. Also measure floor to top of pumps for all three stations. This will help with mid level concrete repairs. See Kate for a	Inspections	Eric Sutton	ERIC JACEN on regest from Kate R completed task and forwarded informatiom to Kate for future work	completed
2/13/2018	6673	23 - WW Pump Stations	Grease pumps & motors & exercise valves	Corrective Maintenance	Jody St. George	Discharge valve pump 1 not operating	completed
2/13/2018	6672	23 - WW Pump Stations	Pull pump 2 at station 9 to Inspect for clog	Corrective Maintenance	Jody St. George	No clog found	completed
2/13/2018	6675	23 - WW Pump Stations	Install new bleeder plumbing station 3 pumps	Corrective Maintenance	Jody St. George	Completed	completed
3/17/2018	6881	23 - WW Pump Stations	Power loss pump station A	Corrective Maintenance	Joe Basler	Reset tripped breaker outside.	completed
4/5/2018	7051	23 - WW Pump Stations	Power loss station #4	Corrective Maintenance	Joe Basler	Call in alarm,monitored station 4 while on generator power,notified A.V. & B.B. Hull light on site and restored power.	completed
6/23/2018	7456	23 - WW Pump Stations	Due to comm fails 9:00 pm station checks	Inspections	Eric Sutton	Eric checked stations due to communication loss on scada	completed
12/4/2018	8463	23 - WW Pump Stations	Exercise all valves for quarterly PMs	Corrective Maintenance	Eric Sutton	Eric Dave Cody on site. Inspection of wet wells, also quarterly exercise of all valves in stations. Stations 1,A,3,4. Also checked high alarm floats and sump for operation.	completed

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12/7/2018	8468	23 - WW Pump Stations	Station 5 WW cleaning	Corrective Maintenance	Eric Sutton	Windriver, Eric, Cody on site, to remove debris from WW. Removed cover, turned pumps off to raise WW, pulled aerator from WW vactored WW. Returned station back to operation. Watched pumps cycle.	completed
12/22/2018	8515	23 - WW Pump Stations	Pump Station Communication Failure Call In to JB	Corrective Maintenance	Joe Basler	JB recieved call in around 1:30 for communication failure, spoke with verizon @ 2 AM, Ticket #MA.NE146370, JB called verizon again @ 6:35 AM, Verizon tech onsite @ 9:30 AM to attempt to resolve issue	completed
12/22/2018	8516	23 - WW Pump Stations	Pump station checks due to Comm failure	Corrective Maintenance	Cody Piepenbrink	CP checked pump stations, all stations good, all rtu lights on & no alarms. All drywells dry, etc.	completed
1/8/2018	6362	22 - WW - sewers/pipes/force mains	Responding to weekend call at 7 Meade ave, of a back up issue, recheck st for flow and investigate	Corrective Maintenance	Eric Sutton	Eric Rob Jacen opened MH 20945 (Meade ave) dye tested to MH 20943 (Atlantic ave) dye test was confirmed, flow of line was successful. Also opened MH 20938 (maple way) both lines flowing freely. Aram, John notified. No tie card for property, further investigation needed. Sarno on site said issue with lateral	completed
1/9/2018	6363	22 - WW - sewers/pipes/force mains	Investigation (camera lines) of several manholes near 7 Meade ave to locate lateral due to no tie card (frozen or debris)	Corrective Maintenance	Eric Sutton	Eric Dave opened MH 20932 (valley beach) observed 8" line (possible lateral) to 7 Meade, CCTV line at 100` in found unmapped MH, which services 22R VB, dye tested 22R to confirm.	completed
1/9/2018	6364	22 - WW - sewers/pipes/force mains	Eric Dave investigate several manholes near 7 Meade ave camera lines	Corrective Maintenance	Eric Sutton	Eric Dave opened MH 20938 (Maple Way)camered line 166°, towards MH 20933 (Valley beach)searching for possible lateral for 7 Meade ave. Did observe several laterals on street cannot confirm 7 Meade at this time due to frozen or clogged late re lateral	completed
1/9/2018	6365	22 - WW - sewers/pipes/force mains	Eric Dave investigate several manholes near 7 Meade ave camera line, MH 20945 TO MH 20943 , observed all tap factories laterals on street.cannot confirm 7 Meade ave lateral at this time due to frozen	Corrective Maintenance	Eric Sutton	Also Ray Sarno back on site performing work not sure if he freed line	completed
1/16/2018	6384	22 - WW - sewers/pipes/force mains	7 Meade ave, dye test & confirmed	Corrective Maintenance	Eric Sutton	Eric,Jacen,John S on site, opened unmapped MH at 22r valley beach driveway. John poured dye at property we observed dye confirmed 7 Meade ave lateral. Also created Tie card for property. 4th time at property	completed
1/30/2018	6534	22 - WW - sewers/pipes/force mains	9 Moreland ave clean out broken	Corrective Maintenance	Eric Sutton	Eric Bill John on site street flooded due to ocean overflow. Clean out to property was damaged due to improper install by Iaria brothers John contacting contractor to reinstall clean out	completed
2/13/2018	6674	22 - WW - sewers/pipes/force mains	Created tie card 11 Mayflower ave	Corrective Maintenance	Eric Sutton	Eric Dave at 11 Mayflower ave, CCTV line to locate lateral service, completed survey, took calculation measurements. Then created tie card, 1.5 hrs CCTV,	completed
2/21/2018	6696	22 - WW - sewers/pipes/force mains	InPipe replaced bacteria bottles & inoculated with kick start powder	Corrective Maintenance	Eric Sutton	Eric Brett replaced 24 bacteria bottles and inoculated with 5 gallons of kick start in each MH	completed

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2/25/2018	6712	22 - WW - sewers/pipes/force mains	Charged Mhs from Jst to Lst	Corrective Maintenance	Eric Sutton	Eric, Dave, Aram, Joe, on site, while waiting for National Water Main to arrive we set trash pump in street at MH 20290 bypassed clog to MH 20283 with 150` of lay flat hose started to relieve charged MHs, when vactor truck arrived, we jetted and vactured lines until clear. Then brought vactor truck to dump debris at pit	completed
3/6/2018	6843	22 - WW - sewers/pipes/force mains	Budget Drain clear clean out 83 Main st out to Gravity line	Corrective Maintenance	Eric Sutton	Eric, Buget Drain on site, snaked lateral, jetted and Cameraed line until cleared. Opened MH 20022 downstream, poured dye in clean out, observed dye in downstream MH. Cleaned area. There is 3 pictures the last picture is area of detail with longitude and latitude	completed
3/6/2018	6844	22 - WW - sewers/pipes/force mains	Check 3 Mhs on Ocean ave see if charged with John Struzziey	Inspections	Eric Sutton	Eric John opened Mhs 20019 charged, 20021 charged, 20027 normal flow. John took pictures	completed
3/6/2018	6845	22 - WW - sewers/pipes/force mains	Eric John Struzziey opened 5 Mhs on Atlantic ave tower of charged	Corrective Maintenance	Eric Sutton	Eric John S opened 5 Mhs on Atlantic ave, MH 20957 normal , 20959 normal, 20962 above normal(pooling), 20971 charged, 20980 normal also 2 on Gun Rock ave MH 20968 normal, 20969 normal	completed
3/9/2018	6860	22 - WW - sewers/pipes/force mains	180 Cadish ave check street for flow	Corrective Maintenance	Eric Sutton	Eric Joe checked 3 Mhs. MH 20233, unmapped MH on U st, and another unmapped MH which is a clean out all flowing freely. Spoke to homeowner she said she had dirty water coming in toilet, Joe advised her to call Aquarian water and explain issue. There wasn't any flushing issue	completed
3/28/2018	6914	22 - WW - sewers/pipes/force mains	Replaced 7 bacteria unit bottles and cleaned	Preventative Maintenance	Eric Sutton	Eric Jim replaced bacteria bottle numbers 9,12, 13, 14, 23, 22, 21 also each unit had to be cleaned wiped due to charged MHs during the storms of march	completed
3/29/2018	6918	22 - WW - sewers/pipes/force mains	In Pipe bacteria replacement of bottles unit #s 15, 20, 11, 18, 19, 16, 17	Corrective Maintenance	Eric Sutton	Eric Jim replaced bacteria bottles and cleaned	completed
4/20/2018	7080	22 - WW - sewers/pipes/force mains	SSO 24 MEADE AVE	Corrective Maintenance	Eric Sutton	Eric, Bill, Cody on site 840 am, accessed issue called Aram he contacted Hoadley for vactor truck to clear blockage, 10:20 Hoadley arrived, set up at MH 20942 down stream, due to drop pipe we had to re-set at upstream MH 20944 and jet line (173") to down stream MH. At 11:20am relieved clog, dye tested line confirmed dye, blockage clear. Cleaned street. Also complete details of work, times, pics sent to Aram	completed
5/3/2018	7213	22 - WW - sewers/pipes/force mains	2nd W/O to back-up call, charged MHs Central ave to Lst to station 6	Corrective Maintenance	Eric Sutton	Eric Bill Rosano Truax on site. 10:15AM Rosano pumping from MH 20250 Lst & Central to relieve pressure in lines and discharging at MH 20373 Kst which flow directly in main line on Nantasket ave. Truax at MH 20283 basketball court jetting clogged line. See next W/O for final work completed.	completed
5/3/2018	7214	22 - WW - sewers/pipes/force mains	10:00 am to 3:00 pm Rosano done pumping and discharging from Mhs now 4" trash pump bypassing station 6	Corrective Maintenance	Eric Sutton	Eric Dave Bill Aram set 4" trash pump at MH 20290 to MH 20326, to bypass station 6 relieve all flow from sewer line from Est to station 6 so Truax can continue jetting. Start bypass 250 pm	completed

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5/10/2018	7233	22 - WW - sewers/pipes/force mains	Lst CCTV project	Corrective Maintenance	Eric Sutton	W/C, Truax CCTV, Vactor, ESI on site. Truax CCTVING jetting and cleaning 12" PVC line from MH 20283A (BF) to MH 20283 (BBC) for inspection due to recent blockage. Also DPW, W/C had to dig and locate MH in field from field drawings which was marked by W/C previously.	completed
5/10/2018	7234	22 - WW - sewers/pipes/force mains	Truax to dump debris	Corrective Maintenance	Eric Sutton	Took Truax to dump debris	completed
5/3/2018	7214	22 - WW - sewers/pipes/force mains	10:00 am to 3:00 pm Rosano done pumping and discharging from Mhs now 4" trash pump bypassing station 6	Corrective Maintenance	Eric Sutton	W\C rosano davis, tv and vactor truck on site for the day relieved issue	completed
5/26/2018	7275	22 - WW - sewers/pipes/force mains	57 mainst / 13 Newton ave extra pics of the day	Emergency Repair	Eric Sutton	Eric Joe on site several duties of the day. Between Aram Johns conversations, we had Hub construction, nationalwater main, on site performing work. What a afternoon into the night	completed
5/26/2018	7274	22 - WW - sewers/pipes/force mains	57 main/ 13 Newton ave sewer smell	Emergency Repair	Eric Sutton	Eric Joe on site Hub construction on site, started digging at dye area, exposed pipe observed 3 holes in pipe, all at the bells, prepped trench to enter and repair with 6" PVC 20' of pipe, was replaced, also a clean out 6?6?4 which was from the plant Removed all old dirt, brought in New dirt and stone for a base. Back filled trench. Vactor truck arrived, set up to jet from MH 20045 Main st then had a 45 minute delay due to mechanical issues of vactor. Finally at 10:30 jetted MH 20045 Downstream jetted upstream relieved clog, street line flowing freely. Also at MH 20045 the discharge into 36"? msin is a drop 4' from surface. Also note that at the discharge was heavy debris 3 inches in, see pic for details. Arrival times and depart times WWTF130PM to 11pm Hub construction 3:45 pm to 10:30 not including travel to and from National water main 915pm to 11pm not including travel.	completed
5/27/2018	7273	22 - WW - sewers/pipes/force mains	57 main st/ 13 Newton ave sewer smell	Emergency Repair	Eric Sutton	Eric Joe on site 13 Newton ave -180' from leak, opened MH, not charged. Applied dye ran water down MH, saw dye reaching surface about 10 min later at area of leak, also observed dye at MH 20045 Main st drizzling out due to clogged line at discharge. Went back to plant got camera, camered line observed 6" PVC for 90' then turned to clay. At 110' camera under water, then abandoned survey. Brought camera to MH 20045 Main st observed clog couple inches in from discharge	completed
5/29/2018	7283	22 - WW - sewers/pipes/force mains	Replacement of bacteria bottle	Preventative Maintenance	Eric Sutton	Eric Cody replaced 9 Bacteria bottles	completed
5/30/2018	7285	22 - WW - sewers/pipes/force mains	Opened 3 Mhs for John Struzziey	Inspections	Eric Sutton	Eric Cody opened 3 MHS at Rockland circle area dye tested 1 MH	completed
5/10/2018	7233	22 - WW - sewers/pipes/force mains	Lst CCTV project	Corrective Maintenance	Eric Sutton	cctv work completed line jetted and cleared	completed
1/30/2018	6534	22 - WW - sewers/pipes/force mains	9 Moreland ave clean out broken	Corrective Maintenance	Eric Sutton	outside contractor fix damaged cleanout	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
5/3/2018	7213	22 - WW - sewers/pipes/force mains	2nd W/O to back-up call, charged MHs Central ave to Lst to station 6	Corrective Maintenance	Eric Sutton	W/C ,Rosano Truax on site for the day jetted and vactured collection system	completed
7/31/2018	7639	22 - WW - sewers/pipes/force mains	Summit Avenue dye testing for John Struzziery	Corrective Maintenance	Eric Sutton	Eric Cody John on site. Dye tested 33, 29, 25 properties for sale of property 33. Observed the 3 properties were connected to the 4" line, which were not identified to any drawings. We confirmed thru the dye test. I will put the information on the GIS program. Also we will camera line to locate service connections week of 8/6/18. Also showed John a abandoned sewer on st which he wants to fill in and showed him other properties across st on Summit where sewer lines run behind the houses in a different direction see pic	completed
8/1/2018	7756	22 - WW - sewers/pipes/force mains	Check nantasket ave / bay ave east national grid dig safe	Corrective Maintenance	Eric Sutton	Eric Mike on site, national grid working in street, dig safe was unclear which address. Went to area no dig safe required	completed
8/21/2018	7786	22 - WW - sewers/pipes/force mains	GIS 13 MHs in village area	Administrative	Eric Sutton	Eric at Channel st performing GIS survey of MHs, identified flows of pipes 8 am 1030am. Returned to plant documented on computer. After lunch Eric Cody surveyed Main st then went to Highland ave surveyed cross country lines behind houses 41 thru 58 identified flows of pipes, then documented on computer	completed
8/22/2018	7791	22 - WW - sewers/pipes/force mains	Add Dawn Soap into affected drainage	Corrective Maintenance		Added Dawn Dish soap into D street wet well 1 and 2 as well as 30 B st catchbasin and B st/Central MH	completed
8/23/2018	7792	22 - WW - sewers/pipes/force mains	Inspect cap off at 9 Manomet Ave.	Inspections	Aram Varjarbedian	Inspect Idaho Excavating cap off of 6 inch PVC sewer, since house being demolished. Ties noted.	completed
9/11/2018	7961	22 - WW - sewers/pipes/force mains	CCTV work Ocean ave	Corrective Maintenance	Eric Sutton	Eric Cody on site, camered several segments which was jetted and cleaned due to a observation of a charged MH a week prior	completed
9/18/2018	7979	22 - WW - sewers/pipes/force mains	Checked 4 MHS during high flow due to rain	Corrective Maintenance	Eric Sutton	Eric Jim Jodi at Lst checked MH 20283 basketball court, and MH 20290 Lst both flowing freely. Later checked 2 MHS with John S MH 20903 nantasket ave and MH 20868 both charged due to rain and goes to station 3	completed
9/19/2018	7981	22 - WW - sewers/pipes/force mains	Open 2 MHs across from plant for inspection due to sink hole observed see MH#s in action notes	Corrective Maintenance	Eric Sutton	Eric cody bill john Aqua line on site. 1 opened MH 20122 & MH 20121 about thirty ft apart GO-PRO up and downstream then took camera held lense up with rope down each line for better optics. Observed no defects in either line that would cause any sink hole in street. Aqua line already dug a hole 10` deep in between MHS. Client John Struzziery satisfied with outcome hole now being back filled	completed
10/16/2018	8131	22 - WW - sewers/pipes/force mains	23 bay st camera support	Corrective Maintenance	Eric Sutton	Eric on site with camera. 23 Bay st Aqua line excavated lateral due to low flow, John S on site, plumber also. After exposing lateral to main observed hole in 6" pipe, camered line each way 15' pipe good condition, had to replace 6' of line, which wasn't the big problem. Issue was in his vertical line coming off house.	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
10/29/2018	8162	22 - WW - sewers/pipes/force mains	1 Delawanda rd & Rockaway rd valve boxes leaking ground water	Corrective Maintenance	Eric Sutton	Eric on site. Caller observed water leaking from st. 1 Delawanda rd and Rockaway rd 2 valve boxes leaking ground water onto street. This is a ongoing issue after it rains in this area	completed
10/30/2018	8163	22 - WW - sewers/pipes/force mains	Evoqua in for final MH sampling	Corrective Maintenance	Eric Sutton	Eric Ron(Evoqua) on site. Evoqua sampled 4 MHs. 1- influent MH 2- MH 20124 nantasket ave,& main 3-MH 20811 nantasket ave & Water st 4MH 20796 Bay st & Porazzo Evoqua will send report on findings	completed
11/8/2018	8303	22 - WW - sewers/pipes/force mains	Park Ave/Berkeley rd project site visit	Corrective Maintenance	Eric Sutton	PVI Site Design(engineer) Eric Cody on site. Email tpower@pvisiteddesign.com cell# 339 206 1030. Request John Struzziery. Opened MHs, drains and catch basins for assessment of area for property 163 Nantasket project	completed
11/15/2018	8324	22 - WW - sewers/pipes/force mains	353 beach ave cap sewer line for construction	Corrective Maintenance	Eric Sutton	Eric Cody on site, for cap inspection	completed
11/26/2018	8332	22 - WW - sewers/pipes/force mains	Rappo ring Berkley/Nastasket ave	Corrective Maintenance	Eric Sutton	Installed rappo	completed
11/28/2018	8334	22 - WW - sewers/pipes/force mains	58 park ave dye test house	Corrective Maintenance	Eric Sutton	Courtney McCarthy 617 365 5149. Eric Cody on site, returning to dye test house trying to observe dye in street bone found. Reported to Bill B explained issue he will contact husband Patrick who does work for W/C and coordinate time to re dye and camera street to find connection	completed
12/4/2018	8466	22 - WW - sewers/pipes/force mains	Park ave cross county Camera/ dye test area and confirm	Corrective Maintenance	Eric Sutton	Eric Dave Cody John on site. Confirmed 58 Park ave lateral by dye test clean out to 8" PVC line in street. Confirmed unmapped MH off side of rd cross country from Park ave to Rockview rd, behind Saporitos(old restaurant) to Rockland Circle to station 3	completed
12/6/2018	8471	22 - WW - sewers/pipes/force mains	Windriver Eric Cody on site see notes	Corrective Maintenance	Eric Sutton	Windriver Eric Cody on site. Jetted and cleaned MH 20976 to MH 20810, then removal of debris at pit	completed
12/7/2018	8473	22 - WW - sewers/pipes/force mains	Sewer inspection 110 Samoset ave	Corrective Maintenance	Eric Sutton	Eric on site inspected lateral for hub construction, temp time card field demsntions	completed
12/6/2018	8469	22 - WW - sewers/pipes/force mains	Windriver Eric Cody at 13 Berkeley	Corrective Maintenance	Eric Sutton	Windriver Eric Cody on site to clean line. Last week tried to camera line to verify connection to 16" cross country. Ended survey to to debris in line. Now on site to flush line with dye. Eric behind 13 running house, Cody at MH 20878 to verify dye WR operating vactor. Added dye, flushed line, confirmed dye at MH 20878. From 13 to cross country footage 90"	completed
12/6/2018	8470	22 - WW - sewers/pipes/force mains	58 Park ave, final completion of work from earlier observations.	Corrective Maintenance	Eric Sutton	Windriver, Eric,Cody on site. Per order John S Jetted cleaned from MH20876 to MH 20873. Also flushed unmapped cross country MH, Which W/C had confirmed line with dye testing earlier in the week.	completed
12/10/2018	8485	22 - WW - sewers/pipes/force mains	Harborview rd / 58 MH first visual inspection	Corrective Maintenance	Eric Sutton	Eric jim on site inspected 2 MHs on Harborview rd with holes on cover size 21.25 " both are sewers MH in yard behind pool at 58 is sewer size 22.5	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
12/17/2018	8492	22 - WW - sewers/pipes/force mains	Replace 3 broken MH covers	Corrective Maintenance	Eric Sutton	Eric on site, Replaced 3 Mh covers MH 20910, MH 20911,MH 20914 all on nantasket ave by Atlantic Hill. Met Pete Lyons, who was working with National Water Main jetting and cameraing lines for road project.	completed
8/3/2017	5335	22 - WW - sewers/pipes/force mains	28A school st unmapped MH and direction identified	Corrective Maintenance	Eric Sutton		completed
12/13/2018	8487	21 - WW - end users devices - grinder pumps, etc.	Inspect 20 Ipswich low pressure connection	Inspections	Bill Boornazian	Inspected low pressure connection from new grinder service onto north Toro low pressure sewer line. Iria brothers used 1.5 inch HDPE shielded in SDR21 with two Corp stops and a saddle . Piping looked good.	completed
1/3/2018	6351	20 - WW - Collections - General	4 C st back up issue W/C to check street	Corrective Maintenance	Eric Sutton	1130am Eric Dave check street for flow	completed
1/5/2018	6353	20 - WW - Collections - General	Sewer cover for storm drain	Corrective Maintenance	David Wilson	Cover lost during storm replaced with sewer cover	completed
1/7/2018	6354	20 - WW - Collections - General	7 Meade Ave	Corrective Maintenance	Aram Varjarbedian	Callout on 1/6/17 with Joe B. Check street for flow. At MH 20943, 20945, 20938. All normal. Possible "cross country lateral". No tie card at time of insp, Rob Taub 6175199729.	completed
1/10/2018	6356	20 - WW - Collections - General	1046 Nantasket ave back-up issue	Corrective Maintenance	Eric Sutton	1/8/18 Eric Rob Jacen opened MH 20129 for flow street flowing freely advised homeowner to call a plumber	completed
1/10/2018	6357	20 - WW - Collections - General	1039 Nantasket ave back-up issue	Corrective Maintenance	Eric Sutton	1/9/18 11:30am received a email of back-up issue called homeowner told him I checked street the day before and street was flowing freely. Advised to call a plumber, homeowner ended up putting heat to his pipes and freed the flow	completed
1/11/2018	6358	20 - WW - Collections - General	23 Allerton Piont back up issue	Corrective Maintenance	Eric Sutton	Eric Dave opened MH 20160 street flowing freely advised homeowner to call a plumber she has to Roto rooter on way to address issue	completed
1/12/2018	6359	20 - WW - Collections - General	37 CADISH	Inspections	Joe Basler	INSPECTED DOWNSTREAM MANHOLE. MANHOLE FUNCTIONING PROPERLY. DOWNSTREAM MANHOLE NOT SURCHARGED, HOWEVER NO ACTIVE FLOW RUNNING. UPSTREAM MANHOLE FREE OF DEBRIS, NO SURCHARGE. ASSUME THAT TOWN OF HULL SEWER OK. 37 CADISH OWNER SHOULD INSPECT SERVICE IF STILL NOT FLOWING.	completed
1/14/2018	6369	20 - WW - Collections - General	Replaced station 9 parking lot drain cover with missing original. Brought back spare 26".	Corrective Maintenance	David Wilson	Found missing cover while doing stations. Gathered tools and swapped out spare.	completed
1/20/2018	6389	20 - WW - Collections - General	524 Nantasket ave - toilet issue Judy Gray 847 922 3300	Corrective Maintenance	Eric Sutton	2pm to 245pm, Eric, Joe opened MH 20596, (downstream) & MH 20614 (upstream) street flowing freely. Spoke to store owner who already has plumber onsite, told him street was flowing. Also spoke about the clean out in the garage which he was aware of, and he would take care of issue	completed
1/21/2018	6391	20 - WW - Collections - General	58 Bay st blockage in lateral on property .Mark 781 783 5314	Corrective Maintenance	Eric Sutton	Eric, Joe opened MH 20791 (upstream) & MH 20770 (downstream) street flowing freely. Spoke with John Struzziey on Sunday 1/21/18 he retrieved tie card for property gave it to Bill B, who then gave to property owner to proceed with issue. Also occupant of property had plumber on site who said he snaked out 21` and observed the blockage in line	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
12/15/2017	6212	20 - WW - Collections - General	262 Atlantic ave MH surcharged	Corrective Maintenance	Eric Sutton	national water main on site jetted MH FROM THE DOWNSTREAM MH TO THE SURCHARGE CLEARDED LINE STREET NOW FLOWING FREELY	completed
2/4/2018	6645	20 - WW - Collections - General	101 Hampton circle emergency Digsafe call-out by hull public safety	Corrective Maintenance	Bill Boornazian	Water service break on Hampton circle. Police detail called on call phone. BB responded. No tie card available at this time. BB reviewed digging area with Tony from HUB in excavator prior to them proceeding.	completed
2/5/2018	6646	20 - WW - Collections - General	Inspected grinder & water leakage in street at 61 Barnstable road	Corrective Maintenance	Bill Boornazian	Water leaking in right away from under a grinder pump shut off. Determined that the grinder forcemain was fine. Homeowner also die tested from house. Determined it was a broken water service to the house. Aquarium and town dpw also onsite	completed
2/6/2018	6648	20 - WW - Collections - General	Inspected water in street from curb box near grinder at 34 Rockaway	Corrective Maintenance	Bill Boornazian	BB and ES dyed grinder pump and ran 40 gallons through. No change or dye found coming through the curb stop. Sampled water does not appear to be city water or sewerage. DPW and HUb believe ground water come out of curb stops in this area based on previous investigations. W&C will monitor for changes.	completed
2/6/2018	6651	20 - WW - Collections - General	1 adduci way back up issue	Corrective Maintenance	Eric Sutton	1130 am Eric Bill arrived Roto Rooter on site jetting & camera lateral line from clean out to house freed debris assisted plumber with some dye opened MH down stream observed dye with street flowing freely went back to house informed plumber our observations issue solved	completed
2/7/2018	6654	20 - WW - Collections - General	253 Atlantic ave police station toilet issue	Corrective Maintenance	Eric Sutton	10:00am Eric Brett opened MH 20937 observed street flowing freely, spoke to plumber on site, he determined toilet line clogged, he has Ray Sarno snake line	completed
2/8/2018	6663	20 - WW - Collections - General	Water leak at 61 Barnstable	Corrective Maintenance	David Wilson	Followed up with customer. Initially thought grinder pump was leaking. After further inspection, we found that the leak was from a 1 inch water line running perpendicular to grinder pump service connection. Romano Davis was contracted to excavate soil in order to repair water leak. Hole was located under the grinder pump service connection. Aquarian was on site to make repair.	completed
2/11/2018	6668	20 - WW - Collections - General	11 mayflower ave	Corrective Maintenance	David Wilson	DW/RB arrived at address at 12:45. Checked manhole upstream (20773) as well as manhole downstream(20785). Street flowing freely. Left customer form in mailbox. Departed at 1:10pm	completed
2/12/2018	6671	20 - WW - Collections - General	Sample water infront of 41 Park per DPW / Town hall request	Corrective Maintenance	Bill Boornazian	Sampled water from puddle no continued leakage noticed. No chlorine in water. Appears to be ground water. Reported back to Jim Dow	completed
2/21/2018	6692	20 - WW - Collections - General	175 Samaset	Inspections	David Wilson	DW/BB Checked flow in the street before and after address. Did not see a back up. Left a service call form at front door.	completed
2/26/2018	6709	20 - WW - Collections - General	5 Rockview Rd back-up issue during laundry cycle	Corrective Maintenance	Eric Sutton	1230 pm Eric David opened MH 20859 street flowing freely. Spoke to homeowner advised to call a plumber	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
2/27/2018	6713	20 - WW - Collections - General	36 J Street	Corrective Maintenance	Aram Varjarbedian	Insp Manholes J,k,L street and Central Ave. MH 20290 on L St plugged and surcharged with approx 7 ft water. Set up bypass trans pump, for 2 hrs. NWM Svcs in to jet and vac from MY 20283 to 20290. DW,ES, JB assist.	completed
2/28/2018	6718	20 - WW - Collections - General	31 Beacon rd back-up issue	Corrective Maintenance	Eric Sutton	Eric Bill opened MH 20166 downstream street flowing freely, spoke with homeowner advised to call a plumber	completed
3/8/2018	6853	20 - WW - Collections - General	Storm drain support for client around ocean ave / main street	Inspections	David Wilson	Opened storm drain Manholes adjusted pumps took samples of foam. Multiple areas 2.5 hours 3 people.	completed
3/8/2018	6856	20 - WW - Collections - General	Storm water pumping ocean and main BB time 3/8	Emergency Repair	Bill Boornazian	Operating pumps / checking hoses and flow/ directing dpw crews with fuel. Many trips to pumps throughout day and evening. 4 hours over regular 8 hour day. At 10pm during shutdown 6" pump at ocean Ave found rpm hunting. Probably low fuel.	completed
3/9/2018	6861	20 - WW - Collections - General	OCEAN Ave stormwater pumping	Emergency Repair	Aram Varjarbedian	Spent total of approx 3 hrs up in area, pumping, refueling, inspecting.	completed
3/10/2018	6863	20 - WW - Collections - General	OCEAN AVE Pumping & pumps	Corrective Maintenance	Aram Varjarbedian	AV & JK. set up 6 inch at ocean ave with more hose and farther into flooded area. Pump for 5.5 hrs. Move other 6 inch pump down to end of ocean ave and set up with 4 inch hose with dischg over seawall. Run for 2 hrs late in day. Ready to use on Sunday. Didn't want to block entire rd.	completed
3/11/2018	6865	20 - WW - Collections - General	Storm water work on ocean Ave	Corrective Maintenance	Bill Boornazian	Ran one pump on ocean Ave all day. Some work done on hoses and used GoPro camera on a storm drain per client request. BB and DW 2 hours throughout day onsite at ocean Ave.	completed
3/12/2018	6875	20 - WW - Collections - General	Breakdown hoses and pumps at ocean Ave and bring back to plant	Emergency Repair	Bill Boornazian	BB, JS, and Jacen K. Spent 2.5 hours removing the various pump setups on ocean Ave and stored at plant before blizzard hit.	completed
3/12/2018	6868	20 - WW - Collections - General	5 Meade ave slow flow during flushing toilet	Corrective Maintenance	Eric Sutton	Eric Jacen opened MH 20943 street flowing freely	completed
3/15/2018	6880	20 - WW - Collections - General	35 Andrew ave flushing issue	Corrective Maintenance	Eric Sutton	Eric Bill on site spoke to homeowner who had a plumber earlier and cleared line out 150' homeowner felt still had issue, but working. We suggested dye testing line after speaking with John Struzziey on Monday. Bill e mailing (JS) on situation. Cross country could be up to 300'. Also Eric checked downstream MH 20051 on Western ave flowing freely.	completed
3/29/2018	6916	20 - WW - Collections - General	5 wrap O`rings installed along nantasket ave	Corrective Maintenance	Bill Boornazian	BB and JS installed wrap O'rings on noisy MH covers along nantasket ave. 5 completed. Nantasket ave at Q street needs cold patch until frame can be replaced. BB notified Jim Dow.	completed
3/29/2018	6917	20 - WW - Collections - General	11 R street	Corrective Maintenance	David Wilson	DW/JS Got a copy of the tie card for the address. Checked flow in the street at MH20249(downstream) and MH 20202(upstream). Street is flowing freely. Notified customer and gave her lateral form and a copy of the tie card. There is a large tree growing next to lateral.	completed

Schedule Date	WO #	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
4/10/2018	7061	20 - WW - Collections - General	Custok mer states that there is a backup at 6 Montana.	Inspections	David Wilson	Inspected manhole flow in street.	completed
4/26/2018	7097	20 - WW - Collections - General	7 Bluff rd	Corrective Maintenance	Eric Sutton	Eric Dave opened MH 20205 downstream & MH 20252 upstream street flowing freely. Sarno drain on sight he got 50` out from house couldn't get out any further. No tie card also spoke to homeowner. Spoke to Aram and we will camera line to fined service on Friday.	completed
4/27/2018	7104	20 - WW - Collections - General	7 Bluff rd blockage on property lateral	Corrective Maintenance	Eric Sutton	Eric Cody back to camera line, from MH 20254. At 88' located service, line & service hoof condition. Marked street for Sarno drain. Sarno stuck 40' from house and it's about 80' to street. Spoke to homeowner about putting double Y clean out in yard for future issues, also Sarno mentioned the day before. Also making Tie Card for property, told homeowner I would give him a copy	completed
4/30/2018	7108	20 - WW - Collections - General	Check puddles at either end of Gun Rock ave (request J Struzziey)	Corrective Maintenance	Eric Sutton	Eric Jim observed puddles & either end of Gun Rock ave. Observed standing water due to rain and no place for drainage. Need sun to evaporate. PH& AMMONIA test done negative results.	completed
5/1/2018	7208	20 - WW - Collections - General	96 Spring Street	Corrective Maintenance	Bill Boornazian	BB & JG met with John S. And homeowner. Opened street MH 20100 flow normal just downstream of suspected sewer service connection. Reviewed options with homeowner and recommended plumber.	completed
5/3/2018	7212	20 - WW - Collections - General	24 E st back-up issue	Corrective Maintenance	Eric Sutton	Eric Dave Bill opened MH 20300 Observed MH charged 5'. Went to MH 20290 Lst near station 6 MH charged 9', then opened MH 20283 in basketball court MH charged, this MH IS final MH before station 6, (had issue before. Aram notified Rosano & Truax both on site at 10:15 see following W/Os for completion & details of work. Homeowner notified of progress	completed
5/11/2018	7235	20 - WW - Collections - General	IN-PIPE BACTERIA UNIT 15 circuit board	Corrective Maintenance	Eric Sutton	IN-PIPE unit circuit board battery connection was damaged during one of the storms or several, observation was noticed on 5/1/18 during monthly refill. Emailed John Williams he sent out new circuit board, which was received on the 10th of May. I replaced board on the 11th and installed unit at proper MH	completed
5/14/2018	7240	20 - WW - Collections - General	BB assist Jason kreil shooting invert elevations on summit ave	Corrective Maintenance	Bill Boornazian	Took two invert elevations for possible sewer rerout on summit ave easement. Jason has elevation delta for slope analysis.	completed
5/22/2018	7262	20 - WW - Collections - General	197 Nantasketave blockage in line on property. Pete Vanderweil dream machine 617 595 8393	Corrective Maintenance	Eric Sutton	Eric Joe on site. Opened MH 20849 street flowing freely. Spoke to property owner and Drain Co showed tie card, Drain Co doing more snaking of line and investigative work	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
5/29/2018	7280	20 - WW - Collections - General	11 harbor view rd. Check MH 20057 for flow	Corrective Maintenance	Eric Sutton	Eric Jim on site, marked st from tie card, measured distance from mark to MH 20057, camered line observed service connection, looked good. Streetflowing freely Spoke with homeowner he had muzzi drain there few day earlier, he said he hit block in street, advised homeowner to call back muzzi and camera lateral from inside home.	completed
6/8/2018	7415	20 - WW - Collections - General	3 harbor view rd blockage in line on property	Corrective Maintenance	Eric Sutton	Eric Cody opened MH 20068 upstream & MH 20068A downstream streetflowing freely. Plumber on site, cleared property line house operational. No tie card, however able to create TIE CARD for property with plumber assistance.	completed
6/20/2018	7449	20 - WW - Collections - General	245 nantasket ave problems flushing toilets	Corrective Maintenance	Eric Sutton	Eric Cody on site opened MH, observed no flow. Spoke to restaurant owner, he said he had issues with toilets, I dye tested sink Cody didn't observe any flow, advised to call a plumber, and let us know the the outcome	completed
6/21/2018	7452	20 - WW - Collections - General	6 Beacon rd charged lateral due to crushed/ broken	Corrective Maintenance	Eric Sutton	Eric at plant retrieved tie card, met plumber(drain ambulance) & homeowner checked MH streetflowing freely. Plumber will snake and camera lateral. About 1130 pm spoke to homeowner plumber found crushed/ broken line. Possible national grid damaged lateral	completed
6/22/2018	7455	20 - WW - Collections - General	6 Beacon rd pipe repair	Corrective Maintenance	Eric Sutton	Eric checking on work performed at 6 Beacon rd Aqua line excavated at location of break located by plumber the previous night by camera and locator device, Aqua line in process of repair	completed
6/23/2018	7458	20 - WW - Collections - General	All remote station communication is down	Corrective Maintenance	Outside Contractor	Contact verizon and open repair ticket. Problem part of larger problem with circuits and verizon working at higher level to resolve. Follow up with additional calls for updates, additional station checks to make sure stations running ok. After they restored system, all commfails cleared. Verify on Scada and trends.	completed
6/21/2018	7452	20 - WW - Collections - General	6 Beacon rd charged lateral due to crushed/ broken	Corrective Maintenance	Eric Sutton	aqua line follwed up and on site to repair damaged lateral	completed
6/26/2018	7460	20 - WW - Collections - General	98 Salisbury st check grinder issue, not town owned	Corrective Maintenance	Eric Sutton	Eric Dave on site, not town owned grinder, light sewage leak on property due to possible shut off valve damaged from heavy equipment driving on lawn near edge of property. Observed area took pictures, conveyed to Bill Boornaizian, who would reach out to John Struzziey to follow up with homeowner	completed
7/3/2018	7605	20 - WW - Collections - General	Call out street flooding.	Corrective Maintenance	Joe Basler	Called by police dispatch and Aram due to heavy rains. Went to D st. Started portable pump to assist D st. Pumps in draining rain water. Went to plant and checked D box for water level. Water level was in acceptable range, proceeded to Dst to determine if portable pump was still necessary. Rain water had receded and pump was turned off.	completed

Schedule Date	WO#	Asset Name	Description	Туре	Employee	History Notes	Current WO Status
8/1/2018	7754	20 - WW - Collections - General	Dump debri in landfill pit	Corrective Maintenance	Eric Sutton	Wind river at dump, removal of debri from truck from station 5 wet well	completed
10/10/2017	5758	20 - WW - Collections - General	Atherton, Berkley to Park ave needs cleaning	Corrective Maintenance	Eric Sutton	W/C, John Struzziery, Mat Galager from Windriver on site , cleaned line from Atherton ave to Berkley to Park ave, some of these lines are cross country. Also the lines are 12 to 14 inch	completed
9/14/2018	7975	20 - WW - Collections - General	485 nantasket ave back up issue	Corrective Maintenance	Eric Sutton	Eric bill on site, check MH 20630 on nantasket ave street flowing freely spoke with owner, there is a reoccurring blockage at property. She had Drainbulance(plumber) check issue he camered from toilet, clean out not accessible he observed maybe a brick in line. Bill emailed JS on issue for further investigation	
10/15/2018	8125	20 - WW - Collections - General	Push camera 23 Bay Street	Corrective Maintenance	Bill Boornazian	Used push camera to locate sewer service due to previous backup call in. This is to assist excavation planned tomorrow . 3 people were used .	completed
11/21/2018	8328	20 - WW - Collections - General	58 park ave periodic low flow in house	Corrective Maintenance	Eric Sutton	Eric Cody on site. Opened 3 MHs o n st. MH 20876(dead end) Flows to MH 20873 street had no flow but ok. In between those 2 MHS is a 18" cover which is off the side of road unmapped, opened MH removed small debris, observed flow, believe this 3" line is here see pick.	completed
12/5/2018	8467	20 - WW - Collections - General	Linden pond assistance	Corrective Maintenance	Eric Sutton	Eric Dave at Linden pond, assisting, Dick Gould, Rob Scott, Aqua line. Used crane truck with 200 gal tote pumped MH out with pump into tote, decanted at Linden plant twice, 400 gal total. Inspected piping in MH. Lined and cleaned area.	completed
12/12/2018	8486	20 - WW - Collections - General	55 Harbor view rd investigate/ dye test MH confirm sewer or drain	Corrective Maintenance	Eric Sutton	Eric Cody on site. Found Drain on Christine rd with flow, poured dye in drain MH went behind 56 harbor view rd confirmed dye. Then went around corner down stream to 1163 Nantasket rd and opened another drain MH, that had flow confirmed dye test. Reported to John Struzziery	completed

Schedule Date	WO #	Asset Name	Description	Type	Employee	History Notes	Current WO Status
3/7/2018	6847	PS Trailer Mounted Generator	Bring gen to station A for storm	Corrective Maintenance	Jody St. George	Delivered to station A and tested	completed
3/12/2018	6866	PS Trailer Mounted Generator	Intermittent running issue.	Inspections	David Wilson	DW/JS tried to replicate running issue from test last Thursday. Ran for 20 minutes w/out issue. Left in place	completed
11/12/2018	8307	PS Trailer Mounted Generator	Ran Generator stationed at pump station A	Corrective Maintenance	Eric Sutton	Eric on site. Ran generator stationed at pump station A, also plugged in block heater with a cord ran into station. No issues	completed
11/2/2018	8275	PS D Building	Portable 4A trash pump back on site	Corrective Maintenance	Eric Sutton	Eric Aram transported trash pump back to station. Pump was back at shop doing annual PM	completed
2/10/2018	6666	PS D - DPW Stormwater Pump Station	Ready pump for service	Corrective Maintenance	Aram Varjarbedian	Close ports, fill volute, chk oil. Hook up suction hose. Run, prime pump, chk flow in anticipation for rain event. Chk also P1 and P2 ok and in auto. 461.4 hrs on pump.	completed
2/26/2018	6710	PS D - DPW Stormwater Pump Station	Returned pump to station and made ready for service.	Preventative Maintenance	David Wilson	Cleaned out pump cavities, checked battery, oil level and fuel level.	completed
8/22/2018	7789	PS D - DPW Stormwater Pump Station	Pump 2 failed to turn on in auto. 4" Thompson pump had to run for half an hour.	Corrective Maintenance	David Wilson	Inspected float switches for pump 2. Both are functioning properly. Found 8' section of 2" suction hose in wet well. Removed 2" hose from wet well and verifed float switch operation.	completed
9/11/2018	7941	PS D - DPW Stormwater Pump Station	D Street Call in, Astronomical Tide	Corrective Maintenance		CP called in by AV @12:22 AM to D street for Call in due to astronomical high tide and heavy rain, High tide at 12:45 am and WW at 68" on arrival, Trash Pump started at 1 am, Inspected red area streets and conditions ok, Trash pump shut off around 3:30 AM	completed
9/12/2018	7966	PS D - DPW Stormwater Pump Station	Added 15 gal of fuel to trash pump also added more dove soap to wetwell for cleaning of diesel fuel poured in catch basin weeks ago	Corrective Maintenance	Eric Sutton	Eric dave added fuel to trash pump also added dove soap to wetwell for cleaning of diesel fuel poured into drainage system weeks ago	completed
9/13/2018	7967	PS D - DPW Stormwater Pump Station	4:50 am check D st area due to rain	Corrective Maintenance	Eric Sutton	Eric on site, after Adam called to check area. Aram on scada saying pump 2 wasn't coming at proper level of float, checked pump 2 for operation pump was operating when in hand. However when in auto pump wouldn't operate its possible float is hung up on ladder will check station at normal operating hours	completed
10/27/2018	8161	PS D - DPW Stormwater Pump Station	4 inch trash pump will not pump	Corrective Maintenance	Aram Varjarbedian	After unsuccessful attempt to run pump, ES called in to assist, as we suspected a clogged hose in wetwell. The hose could not be pulled out, as it was heavy and possibly stuck. Swap hoses to verify pumping and bring another hose down to the station. Pump operational at 2:50pm.	completed
10/4/2018	8119	PS A Wet Well	Wet well cleaning	Corrective Maintenance	Outside Contractor	WRE vac truck and Dave Wilson clean wetwell	completed
12/4/2018	8460	PS A Wet Well	Inspection of wetwell	Corrective Maintenance	Eric Sutton	Eric Cody on site inspected WW. Zero debris	completed
3/14/2018	6874	PS A Transfer Switch	Reroute gen wires through wall vent	Corrective Maintenance	Jody St. George	Completed	completed
2/20/2018	6688	PS A Sump Pump	Sump in dry well having some issuses	Corrective Maintenance	Eric Sutton	Inspection of station observed dry well had a few inches of ground water at bottom, opened MH put hose in wetwell turned on puddle pump to extract water	completed
2/28/2018	6717	PS A Sump Pump	Inspection of sump pump	Preventative Maintenance	David Wilson	ES assisted. Uninstalled sump pump for inspection. Pumped out all water in sump and cleaned out debris. Compared output with known good pump. Low output. Installed New sump pump. Verified proper working condition.	completed



APPENDIX C: COMPLETED CMOM AND I/I PROJECTS EXPENDITURES

	Town - Hull Sewer Department - Expenditures related to I/I and CMOM work								
	oice Amount	Invo	Scope of Work	Work Completed	Invoice Date	Contractor			
	5,836.28	\$	repair at 42 Valley Beach Rd	6/13/2018	6/27/2018	Aqua line			
	4,971.40	\$	repair 6 Beacon Rd	6/22/2018	6/25/2018	Aqua line			
	7,494.89	\$	repairs Nantasket Ave & Salisbury	6/28/2018	6/29/2018	Aqua line			
	8,278.90	\$	Frame and Covers Replacements	9/26/2018	10/10/2018	Aqua line			
	4,821.87	\$	Frame and Covers Replacements	11/17/2018	11/19/2018	Agua line			
	5,569.91	\$	Repair at 23 Street	10/16/2018	11/16/2018	Aqua line			
	8,862.20	\$	Repair at 11 Harborview Road	8/3/2018	8/14/2018	Agua line			
	6,087.55	\$	Frame and Covers Replacements	7/9/2018	7/27/2018	Aqua line			
	6,065.76	\$	Chimney Rebuild 98 Salisbury	7/10/2018	7/27/2018	Aqua line			
	7,118.35	\$	Condition Assessment of Force Main 1		5/16/2018	BSI Engineering			
	1,541.57	\$	Condition Assessment of Force Main 3		5/9/2018	BSI Engineering			
	4,624.72	\$	Condition Assessment of Force Main 1		5/9/2018	BSI Engineering			
	6,122.95	\$	Manhole Covers		4/27/2018	EJ USA			
	4,612.87	\$	Manhole Covers		3/1/2018	EJ USA			
	7,572.00	\$	Repair Atlantic Ave, Valley Beach, and Rockland House Rd	5/14/2018	5/29/2018	Hub Construction			
	9,380.50	\$	Repair Newton Ave	5/26/2018	5/29/2018	Hub Construction			
	8,019.00	\$	Repair Main Street	6/5/2018	6/13/2018	Hub Construction			
	1,570.00	\$	Frame & Cover Mayflower Ave	2/21/2018	2/23/2018	Hub Construction			
	3,854.25	\$	Gunrock Sewer Renewal Design	5/25/2018	6/12/2018	Woodard & Curran			
	13,565.22	\$	Gunrock Sewer Renewal Design	4/27/2018	5/10/2018	Woodard & Curran			
	3,975.50	\$	Gunrock Sewer Renewal Design	3/30/2018	4/18/2018	Woodard & Curran			
	3,364.00	\$	Gunrock Sewer Renewal Design	2/23/2018	3/7/2018	Woodard & Curran			
	241.75	\$	Gunrock Sewer Renewal Design	12/28/2018	1/18/2018	Woodard & Curran			
	2,078.50	\$	Gunrock Sewer Renewal Design	11/30/2018	12/26/2018	Woodard & Curran			
	14,517.25	\$	Gunrock Sewer Renewal Design	10/26/2018	11/19/2018	Woodard & Curran			
	23,180.32	\$	Gunrock Sewer Renewal Design	9/28/2018	10/29/2018	Woodard & Curran			
	7,199.75	\$	Gunrock Sewer Renewal Design	8/31/2018	9/14/2018	Woodard & Curran			
	4,735.25	\$	Gunrock Sewer Renewal Design	7/27/2018	8/10/2018	Woodard & Curran			
\$ 91,763.12	15,051.33	\$	Gunrock Sewer Renewal Design	6/29/2018	7/18/2018	Woodard & Curran			
\$ 3,504.75	3,504.75	\$	Headworks & Pump Station repairs engineering	11/30/2018	12/21/2018	Woodard & Curran			
	45,969.06	\$	Influent Gate	3/30/2018	4/17/2018	Woodard & Curran			
\$ 147,407.17	101,438.11	\$	Influent Gate	12/29/2017	1/19/2018	Woodard & Curran			
\$ 52,238.60	52,238.60	\$	Influent Suction Valve Replacement	3/30/2018	4/3/2018	Woodard & Curran			
	5,435.74	\$	Interceptor Assessment	5/25/2018	6/12/2018	Woodard & Curran			
	12,158.66	\$	Interceptor Assessment	4/27/2018	5/10/2018	Woodard & Curran			
	18,705.96	\$	Interceptor Assessment	3/30/2018	4/18/2018	Woodard & Curran			
	2,733.36	\$	Interceptor Assessment	2/23/2018	3/7/2018	Woodard & Curran			
	8,866.90	\$	Interceptor Assessment	12/28/2018	1/18/2018	Woodard & Curran			
	2,649.60	\$	Interceptor Assessment	11/30/2018	12/21/2018	Woodard & Curran			
	10,397.61	\$	Interceptor Assessment	10/26/2018	11/19/2018	Woodard & Curran			
	11,399.95	\$	Interceptor Assessment	9/28/2018	10/29/2018	Woodard & Curran			
	3,981.82	\$	Interceptor Assessment	8/31/2018	9/14/2018	Woodard & Curran			
	3,978.28	\$	Interceptor Assessment	7/27/2018	8/10/2018	Woodard & Curran			
\$ 81,505.22	1,197.34	\$	Interceptor Assessment	6/29/2018	7/18/2018	Woodard & Curran			
	3,206.25	\$	Pump Station 1&3 and Force Main Condition Testing	5/25/2018	6/12/2018	Woodard & Curran			
	931.50	\$	Pump Station 1&3 and Force Main Condition Testing	4/27/2018	5/10/2018	Woodard & Curran			
	758.25	\$	Pump Station 1&3 and Force Main Condition Testing	3/30/2018	4/18/2018	Woodard & Curran			
	464.00	\$	Pump Station 1&3 and Force Main Condition Testing	2/23/2018	3/7/2018	Woodard & Curran			
	2,921.25	\$	Pump Station 1&3 and Force Main Condition Testing	12/28/2018	1/18/2018	Woodard & Curran			
	438.50	\$	Pump Station 1&3 and Force Main Condition Testing	11/30/2018	12/21/2018	Woodard & Curran			
	1,233.00	\$	Pump Station 1&3 and Force Main Condition Testing	10/26/2018	11/19/2018	Woodard & Curran			
	524.50	\$	Pump Station 1&3 and Force Main Condition Testing	9/28/2018	10/29/2018	Woodard & Curran			
	1,493.00	\$	Pump Station 1&3 and Force Main Condition Testing	8/31/2018	9/14/2018	Woodard & Curran			
A 400:	3,101.75	\$	Pump Station 1&3 and Force Main Condition Testing	7/27/2018	8/10/2018	Woodard & Curran			
\$ 16,210.25	1,138.25	\$	Pump Station 1&3 and Force Main Condition Testing	6/29/2018	7/18/2018	Woodard & Curran			
\$ 3,893.38	3,893.38	\$ \$	Sewer Condition Assessment	12/28/2018	1/18/2018	Woodard & Curran			
· · ·	505,073.21					Total			

1931 Rose, Stephen	Billing Amount Notes	Sum of DetailsBilling Ar	Row Labels
1901 Gagliard, James \$ 8,746.54 Maintenance and repair work 2402 St. George, Jody \$ 40,933.50 Maintenance and repair work 2402 St. George, Jody \$ 40,933.50 Maintenance and repair work 2432 Tirrell, Douglas \$ 243.25 SCADA WORK - plant an 2736 Boughter, Kenneth \$ 535.50 Maintenance and repair work 3077 Andrews, Donna \$ 52.50 Adm. Support 4060 Kraus, David \$ 6,438.50 SCADA WORK - plant an 4082 Platt, Zachary \$ 113.00 Electrical work - plant 4082 Platt, Zachary \$ 113.00 Electrical work - plant 422 Woorehead, Jesse \$ 10,070.00 SCADA WORK - plant an 500.01 Vehicle Expenses \$ 10,070.00 SCADA WORK - plant an 500.01 Vehicle Expenses \$ 44.00 Vehicle maint. \$ 5200.05 Postage/Shipping \$ 423.91 Plant and PS - R&M w \$ 5200.11 Field Supplies \$ 833.06 Plant and PS - R&M w \$ 5200.12 Pield Supplies \$ 833.06 Plant and PS - R&M w \$ 5200.12 Pield Supplies \$ 53.96 Plant and PS - R&M w \$ 5200.20 Vehicle Expense \$ 53.96 Plant and PS - R&M w \$ 5200.20 Vehicle Expense \$ 53.96 Plant and PS - R&M w \$ 5200.42 Deutonination Chemicals - C/O \$ 5,500.00 Plant and PS - R&M w \$ 5204.21 Acids - C/O \$ 5,500.00 Plant and PS - R&M w \$ 5204.25 Deutonination Chemicals - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.25 Deutonination Chemicals - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.25 Deutonination Chemicals - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.25 Deutonination Chemicals - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.35 Equipment Rental Maint - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.35 Equipment Rental Maint - C/O \$ 4,771.60 Plant and PS - R&M w \$ 5204.35 Equipment Rental Maint - C/O \$ 4,771.60 Plant and PS - R&M w 5204.35 Deutonination Maint - C/O \$ 4,771.60 Plant and PS - R&M w 5204.35 Deutonination Maint - C/O \$ 4,771.60 Plant and PS - R&M w 5204.35 Deutonination Maint - C/O \$ 4,771			
2402 St. George, Jody	,		, ,
2452 Tirrell, Douglas S			
2736 Boughter, Kenneth S S35.50 Maintenance and repair work 3077 Andrews, Donna S S2.50 Adm. Support 4060 Kraus, David S 6,438.50 SCADA WORK - plant at 4082 Platt, Zachary S 113.00 Electricial work - pla 4422 Moorehead, Jesse S 10,070.00 SCADA WORK - plant at 4082 Platt, Zachary S 113.00 Electricial work - pla 5200.01 Vehicle Expenses S 44.00 Vehicle maint. S200.01 Vehicle Expenses S 44.00 Vehicle maint. S200.01 Vehicle Expenses S 44.00 Vehicle maint. S200.02 Plant and PS - R&M w S200.12 Field Equipment S 832.06 Plant and PS - R&M w S200.12 Field Equipment S 748.95 Plant and PS - R&M w S200.20 Vehicle Expense S S3.96 Plant and PS - R&M w S200.20 Vehicle Expense S S3.96 Plant and PS - R&M w S200.20 Vehicle Expense S S3.96 Plant and PS - R&M w S204.21 Acids - C/O S S.500.00 Plant and PS - R&M w S204.22 Dechlorination Chemicals- C/O S 661.50 Plant and PS - R&M w S204.25 Dechlorination Chemicals- C/O S 4,717.60 Plant and PS - R&M w S204.29 Buildings & Ground Maint - C/O S 2,623.58 Plant and PS - R&M w S204.29 Buildings & Ground Maint - C/O S 4,978.36 Plant and PS - R&M w S204.32 Equipment Rental Maint C/O S 4,978.20 Plant and PS - R&M w S204.32 Equipment Rental Maint C/O S 2,832.75 Plant and PS - R&M w S204.33 Laurimentation Maintenance - C/O S 2,038.44 Plant and PS - R&M w S204.34 Instrumentation Maintenance - C/O S 2,038.44 Plant and PS - R&M w S204.43 Uniternative Plant Maint C/O S 2,038.44 Plant and PS - R&M w S204.43 Vehicle Repairs - C/O S 311.40 Plant and PS - R&M w S204.43 Vehicle Repairs - C/O S 313.40 Plant and PS - R&M w S204.43 Vehicle Repairs - C/O S 313.40 Plant and PS - R&M w S204.43 Exprise Plant S204.45 Plant R&M work S204.45 Children Plant S204.55 S204.55 Children Plant S204.55 S204.55 Children Plant S204.55 S204.55 Children Plant S204.55 S204.55 Children Plant			
3077 Andrews, Donna	'		, 6
4080 Kraus, David \$ 6,438.50 SCADA WORK - plant at 4082 Platt, Zachary \$ 113.00 Electrical work - plant at 4082 Platt, Zachary \$ 10,070.00 SCADA WORK - plant at 5200.01 Vehicle Expenses \$ 10,070.00 SCADA WORK - plant at 5200.05 Postage/Shipping \$ 423.91 Plant and PS - R&M w 5200.05 Postage/Shipping \$ 423.91 Plant and PS - R&M w 5200.11 Field Supplies \$ 832.06 Plant and PS - R&M w 5200.12 Field Equipment \$ 748.95 Plant and PS - R&M w 5200.20 Vehicle Expense \$ 53.96 Plant and PS - R&M w 5200.20 Vehicle Expense \$ 53.96 Plant and PS - R&M w 5200.20 Vehicle Expense \$ 53.96 Plant and PS - R&M w 5204.21 Acids - C/O \$ 5,500.00 Plant and PS - R&M w 5204.22 Dehotioriation Chemicals - C/O \$ 661.50 Plant and PS - R&M w 5204.25 Dehotioriation Chemicals - C/O \$ 4,171.60 Plant and PS - R&M w 5204.25 Dehotioriation Chemicals - C/O \$ 4,171.60 Plant and PS - R&M w 5204.25 Plant and PS - R&M w 5204.25 Plant and PS - R&M w 5204.26 Plant and PS - R&M w 5204.27 Misc Maintenance - C/O \$ 4,9774.20 Plant and PS - R&M w 5204.32 Equipment Rental Maint C/O \$ 4,9774.20 Plant and PS - R&M w 5204.32 Equipment Rental Maint C/O \$ 2,018.16 Plant and PS - R&M w 5204.33 Instrumentation Maint C/O \$ 2,018.16 Plant and PS - R&M w 5204.33 Instrumentation Maint C/O \$ 2,068.44 Plant and PS - R&M w 5204.39 Instrumentation Maint C/O \$ 2,068.44 Plant and PS - R&M w 5204.39 Instrumentation Maint C/O \$ 2,068.44 Plant and PS - R&M w 5204.43 Dehotion Supplies - C/O \$ 3,006.00 Plant R&M work 5204.45 Expenses - C/O \$ 14,577.64 Plant and PS - R&M w 5204.43 Plant and PS - R&M w 5204.43 Dehotion Supplies - C/O \$ 14,577.64 Plant and PS - R&M w 5204.45 Expenses - C/O \$ 14,577.64 Plant and PS - R&M w 5204.45 Expenses - C/O \$ 14,577.64 Plant and PS - R&M w 5204.45 Expenses - C/O \$ 14,577.64 Plant and PS - R&M w 5204.45 Expenses - C/O \$ 1,527.01 Plant R&M work 5204.45 Computer S			<u> </u>
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5304.04 Sub: Instrumentation - C/O \$ 950.00 Plant and PS - R&M w	76,017.84 Plant and PS - R&M work		5304.02 Sub: Electrical - C/O
	3,050.00 Plant and PS - R&M work		5304.03 Sub: Engineering - C/O
F204 0C Cub. Machanical C/O C C 27.77E 27 Plant and DC D0A4.	950.00 Plant and PS - R&M work		3304.04 Sub: Instrumentation - C/O
5504.00 500 - Mechanical - C/O 3 21,7/5.27 Plant and P5 - R&M W	27,775.27 Plant and PS - R&M work	;	5304.06 Sub - Mechanical - C/O

Town expenditures	\$ 505,073	
W&C expenditures under Contract Oprations	\$ 584,644.5	2
Total R&M expended for 2018	\$ 1,089,718.	3



APPENDIX D: UNAUTHORIZED DISCHARGE SUMMARY

	Date	Type of Asset	Address	Cause of Discharge	If caused by blockage, what was blockage	If mechanical, when was the last inspection/failure date	Begin Time / Date	Stop Time / Date	Notification Source	Estimated release volume (gallons)	Method Used to Estimate Volume	Corrective action completed	Impact area Cleaned/disinfected?	Release to Town MS4?	Release to surface water
1	9/18/2018	MH 20897	121 Nantasket Ave.	Rain event surcharged sewer system	N/A	N/A	9/18/2018 / 12:25 PM	9/18/2018 / 1:25 PM	Email	600	Visual	Rain stopped & flows subsided. Road was shut down	N/A	Yes	Yes
2	8/8/2018	WPCF	1111 Nantasket Ave.	Operational error by Trucking Co.	N/A	N/A	8/8/2018 / 8:10 AM	8/8/2018 / 8:11 AM	Email	30	Visual	Used Sandbags, CB spillblockers, septic pump truck called to vacuum up	Yes, Sodium Hypochlorie solution applied,and area hosed down/vacuumed up	No	No
3	7/30/2018	Grinder pump	10-12 Rockaway Ave.	Grinder pump failure	N/A	yes	Unknown	7/30/2018 / 10:45 AM	Email	< 40	Visual	sepcitc pump truck called in and pumped out pump chamber & new grinder pump installed. Pump out contents from catch basin.	Yes, lime was applied	Yes	No
4	6/12/2018	Pump Station - LS A	42 Valley Beach Rd.	Broken drain back valve during scheduled PM	N/A	last release date 11/25/15	6/12/2018 / 8:00 AM	6/12/2018 / 8:30 AM	Email	< 50	Visual	stopped overflow, repairs made following day	Yes, lime was applied	No	No
5	5/26/2018	gravity sewer line	13 Newton St.	Sewer system blockage, Pipe collapse, Root intrusion	Roots	N/A	5/26/2018 / 12:30 PM	5/26/2018 / 7:45:00 PM	Email	< 75	visual	20 ft of new PVC pipe installed by contractor to replace the failed VC pipe, dye tested, jetted approx 200 ft	Yes, and lime was applied	No	No
6	5/3/2018	gravity sewer line MH 20283	24 E St.	Sewer system blockage in 8-inch gravity sewer line caused back-up into lower level shower stall	debris/ dirt and gravel	N/A	5/03/2018 / 7:37 AM	5/03/2018 / 7:37 AM	Email	0	Visual	Set up bypass with trash pump to relieve surcharge assisted by sewer pump truck and vac/jet truck. Clear blockage by jetting line to pump station	Yes, homeowner took care of.	No	No
7	4/20/2018	MH 20944	24 Meade Ave.	Sewer system blockage	rock,brick fragments, debris	N/A	4/20/2018 / 8:15 AM	4/20/2018 / 9:15 AM	Email	< 20	Visual	Sewer vac/jet truck called in, vacuumed up MH and jetted line [175 ft]	Yes, hosed down area surfaces, vacuumed up	No	No
8	3/13/2018	Pump Station LS A	42 Valley Beach Rd.	Station power loss and back-up generator failure. Ruptured discharge hose on bypass trash pump	N/A	previous week, generator had run, had release from same location 6/12/15	3/13/2018 / 5:15 PM	3/13/2018 / 5:18 PM	Email	< 100	Visual	Rental Portable generator brought in to power up station, since unable to use bypass pump	Yes	No	No
9	3/2/2018	Sewer lateral, where PVC meets clay in street	Main St. near #83	Sewer system blockage, where lateral meets stub connection	Rags/debris	N/A	3/05/2018 / 5:00 PM	3/06/2018 / 10:30 AM	Email	< 50	Visual	Drain cleaning contractor cleared blockage & used sewer camera to inspect. Follow up on 3/7/18 to vacuum out all area catch basins with large vactor truck	Yes, all surfaces washed down and water vacuumed up & catch basins cleaned	Yes	Possibly
10	3/3/2018	WPCF	1111 Nantasket Ave	Rain event/ astronomical high tides	N/A	last release date 4/1/17	3/03/2018 / 12:00 PM	3/3/2018 / 4:03 PM	Email	25,000	visual/calculated estimate	Throttled down influent gate (reduced influent flow) to lower effluent flow during the high tide period where the chlorine contact tanks were surcharged	Yes, water was chlorinated secondary effluent	Yes	Yes
11	2/25/2018	gravity sewer line MH 20290	36 J St.	Sewer system blockage in 8-inch gravity sewer line caused back-up into shower stall	rags/rocks/debris	N/A	2/25/2018 /1:50 PM	2/25/2018 / 5:00 PM	Email	< 25	visual/calculated estimate	Set up bypass with trash pump to relieve surcharge. Had vac/jet truck. Clear blockage by jetting line to/from this manhole	Yes, homeowner contacted cleaning company to clean shower stall area.	No	No



APPENDIX E: EXAMPLES OF PUBLIC OUTREACH DOCUMENTS

MEETING SUMMARY



980 Washington St. Suite 325

Dedham, Massachusetts 02026

Tel. 781-251-0200 Fax: 781-251-0847 mail@woodardcurran.com http://www.woodardcurran.com

MEETING DATE: May 2, 2018 MEETING TIME: 7:00 PM

MEETING LOCATION: Hull High School

REFERENCE: Public Informational Meeting – Fiscal Sustainability Plan Presentation and ATM Warrant

Article Presentation

ATTENDEES: See Attached Sign in Sheet

Prepared by: Rosemary Blacquier/Jason Kreil

The following meeting summary has been interpreted to the best of the writer's understanding with respect to topics discussed. Additions and/or corrections are invited and will be made a matter of record.

General Summary

Hull Sewer Commission called to order at 7:00PM.

Town Manager, Phil Lemnios kicked off the Informational Meeting with introductions of presenters and sewer staff present.

Phil introduced John Struzziery, Director of Wastewater Operations, and turned the meeting over to him.

John opened the presentation portion of the meeting with an overview of the presentation and what would be discussed during the meeting. John turned it over to Rosemary Blacquier, Woodard & Curran, to detail the work completed as part of the Fiscal Sustainability Plan.

Rosemary presented the portion of the Informational Meeting Presentation focusing on the Fiscal Sustainability Plan work and results undertaken by the Town. It was noted that an electronic copy of the Report is on the Town's Sewer Department webpage.

See attached Presentation for items as noted above as presented.

Comments/Questions Raised

- 1. Are the items on Article 20-Year One FSP and CMOM just for this year? No, they are the Year One upgrades in the FSP. Next milestone are Year Five.
- 2. Is the WWTF protected from storms and sea change? Taking measures now and in the future to ensure this.
- 3. Reported that the Town spent \$6M from storm of 2013-has the Town made a change in operational staff or is the same company still there? *Staff was changed to Woodard & Curran.*
- 4. Are the current costs for Hingham and Cohasset included in the rates? Hingham and Cohasset have current Intermunicipal Agreements and pay Hull for costs associated with treatment and discharge of effluent per such.
- 5. Do we need to approve the five articles within Article 20? Yes, each sub-article addresses specific issues. Together, they address the major items from the FSP and CMOM for Year 1.
- 6. Will there be any impacts during construction? Locally specific with the interceptor, pump stations etc. A traffic plan will be developed prior to any construction.
- 7. Could Hull accept leachate from outside and raise revenue? Yes, but would only be applicable to close communities as there are other facilities within range of most others.

Public Informational Meeting Meeting Date: May 2, 2018, 2018

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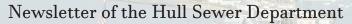
- 8. Did ocean water infiltrate the WWTF over the last storm? No, work has protected this from happening for the most part. A new seawall was built and gate was installed at WWTF. Additional planning proposed will prevent this from happening in the future.
- 9. Doesn't the own have a Rainy Day Account to pay for breakdowns and things wearing out? The Town has an Enterprise Fund for everyday maintenance that takes care of small repairs. Larger, capital repairs, upgrades are what the ATM Article 20 addresses.
- 10. We hope that you will do the PowerPoint at ATM so all understand the importance of passing all five sub-articles. Yes, this same presentation will be made.
- 11. With the \$6M repair, has all equipment been moved off lower floors?
- 12. When will the bond done for the \$6M repair be done? 2021.
- 13. Will rates go down? Cannot respond-will depend on timing.

Conclusions from Meeting: Follow Up:

All in attendance agreed that it is necessary to approve all sub-articles on Article 20. Important to stress that each is a separate, but necessary project to complete and approve at this ATM.

Sewer Works

Summer 2018





A Message from John J. Struzziery, P.E. Director of Wastewater Operations

First, thank you for your overwhelming support at the Annual Town Meeting. The approved \$17 M bond will provide the funding for our highest priority projects and the necessary planning to achieve our objectives of Reliability, Redundancy, and Resiliency. Over the past year, we have been planning and performing condition assessments on much of our sewer system and other infrastructure at the wastewater treatment facility. These assessments will form the basis of what we do, where we do it, and how soon work gets done. As noted at the Annual Town Meeting, our immediate (2018/2019) priorities are as follows:

- Rehabilitation of the Nantasket Avenue interceptor;
- Sewer Improvements in the Atlantic Avenue/Gunrock area;
- · Replace/Rehabilitate the force mains for pump stations no. 1 and 3;
- Removal of the underground fuel storage tank and replacement with an above ground tank;
- Facility repairs to the generators, aeration tanks and secondary clarifiers; and
- Planning for the next level of projects.

See the sidebar to better understand the meaning of your current sewer bill that is included with this newsletter. This bill represents a change to our billing method that we believe provides a more equitable and fair system to distribute costs among all users. This approach also provides a more even and reliable distribution of revenue to avoid fluctuations in usage that we experienced in the past.

The Sewer Department is continuing to pursue outside funding, the \$62,000 energy grant from the state is in the process of getting authorized. We recently received word that we received a \$148,000 Coastal Zone Resiliency Grant to relocate and elevate the primary electrical service and transformer that serves the facility. We appealed a denial to FEMA on a Hazard Mitigation Grant to relocate the HVAC and electrical systems to the second floor of the facility. Lastly, we are processing the documentation needed for the State Revolving Fund (SRF) loan program that will fund much of our work through low interest, long term bonding.

We continue to make progress and improvements and look to you for support and patience during the upcoming construction period.



Wastewater Treatment Facility

Sewer Billing

The sewer billing for this period reflects a change in our rate methodology. As indicated at the Annual Spring Town meeting, we've changed our rate structure to provide a more sustainable revenue for operations and capital projects to better assure a more reliable and effective revenue stream.

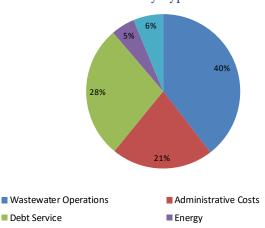
The new billing change includes a \$15 per month base fee, as well as a volumetric rate of \$13.00 per CCF (increase of \$1.00 per CCF or 8.3%). Based on an average ANNUAL usage of 70 CCF, the average annual sewer bill would be \$1,090 under the rate structure as compared to \$840 under the prior rate structure. See chart below for breakdown of costs by type.

Starting in November, billing will commence on a quarterly basis. We expect that this will be a preferred way of distributing the costs over the year and make it easier to pay this bill.

Please note that a lien will be placed on any unpaid sewer bills from FY 2017 and FY 2018 on the FY 2019 Real Estate bill due February 4, 2019.

Sewer Rate Broken Out by Type of Cost

Planned Capital Equipment & Repairs



Storm Update

This past winter's Nor'easters put us on alert and in storm and high flow management mode on a weekly basis. Overall, we fared well with the most significant events being on January 4th and March 2nd. These types of storms are one of the driving factors for the capital work related to resiliency that you see listed below in work completed/ongoing. Most of the storms came with rain and/or snow, high winds and high tides with storm surge. On the March 2nd event, we had a peak flow of 9.5 mgd, 2.3 inches of rain, used the influent gate to control flows at the plant while watching upstream interceptor levels, lost power through a good part of the event and lost communication systems with remote pump stations. While there were many equipment issues throughout each event, they were addressed with either additional rental units and/or maintenance during the events. Woodard & Curran performed admirably during each event and we conducted lessons learned after the events of what went well and what needs improvement. We also assisted DPW in supplying and monitoring portable pumps in the Ocean Avenue area during these storms to help alleviate flooding.

Work Completed/Ongoing:

Capital Planning/Capital Projects

- Design is progressing for the interceptor sewer along Nantasket Avenue and Fitzpatrick Way to be renewed without excavation using a cured-in-place lining system. Construction is planned in 2019.
- Design is progressing for a pipeline renewal plan for the Atlantic Avenue/Gunrock area. Construction is planned for 2019.
- Condition assessments of the force mains (pressure pipes) for Pump Station #1 on Atlantic Avenue and Pump Station #3 along George Washington Boulevard were completed and showed that force main #3 is in better condition than first thought, however, force main #1 will need to be replaced or rehabilitated as part of the Atlantic Avenue project.
- We have done some work (see photo) and planning the design of critical equipment replacements at the
 wastewater treatment facility. Other activities are also underway in performing the engineering needed to
 obtain pricing proposals before doing the work.

Valve Replacement Excavation

Protection of Plant during High Flows

- An auxiliary pump and piping to supplement effluent pumping needs as well high flow diversion is scheduled for completion in early 2019.
- Design completion to replace the HVAC system on the first and second floor of the Administration Building is planned for the second half of this year, with construction in 2019.
- Replacement of the effluent pump isolation valves is expected by year end.

Odor Control

 We continue to be proactive in addressing odors by anticipating what work activities might generate odors and plan accordingly such as tank cleanings, using chemicals in the collection system to minimize odor potential, and will be replacing the odor media filter material since it is nearing its useful service life.

Technology Enhancements

· We continue to enhance our GIS mapping and documentation system and the Town received a regional grant to help advance this effort.

Reminders

We continue to get emergency calls for clogged pipes, pumps and equipment. Many of these result in wastewater discharges to the ground which could have been avoided. Such discharges must be reported to numerous local, state, and federal agencies and could result in fines. Our goal is to avoid any discharges, fines and violations.

PLEASE DO YOUR PART BY KNOWING WHAT NOT TO PUT IN THE SEWER

NO WIPES IN THE PIPES: Wipes, rags and other debris not intended to be in the sewer (even if labeled as Disposable and Flushable), are a major source of sewer backups and clogged pipes. **Wipes create blockages in pipes.**

THE DRAIN IS NOT A DUMP: Fats, Oils & Grease (FOG) also clog sewer pipes. Do your part by **NOT** disposing of FOG down the drain; rather, can it and let it solidify, and then dispose in the trash.

REMEMBER THE 3 PS: NOTHING DOWN THE TOILET BUT PAPER. PEE AND POO!!

Contact Information: Email: sewer@town.hull.ma.us Telephone: 781.925.1207

Sewer Works

Fall 2018
Newsletter of the Hull Sewer Department



A Message from John J. Struzziery, P.E. Director of Wastewater Operations

The Sewer Department has continued to be busy over the past few months, in some cases completing work that was started earlier in the year. In addition to the projects noted below, there have been many other jobs that take significant planning, since many projects depend on something else being done in advance or coordination with operations. We continue to prioritize projects to achieve **reliability**, **redundancy**, **and resiliency**.

Billing: The sidebar summarizes our prior change of the billing method and the start of quarterly billing with this sewer bill. We hope you agree that quarterly billing is preferred.

Funding: The Sewer Department is continuing to pursue outside funding. We submitted the four projects previously voted at the May Town Meeting for the State Revolving Fund (SRF) loan program that will finance much of our work through low interest, long term bonding. Projects include wastewater treatment facility (WWTF) and sewer system upgrades and improvements; implementing recommendations made in the WWTF facilities plan, performing the sewer system evaluation survey that will help identify locations of infiltration and inflow (excess water in the sewer system) as well condition assessments of underground piping and the outfall at the WWTF and performing the reliability centered maintenance program. In addition, we will likely be pursuing a FEMA Hazard Mitigation project in January. Due to the competitiveness and limited availability of funding, we are evaluating what makes sense for this program. We also plan on submitting a CZM Coastal Zone Resiliency grant application in early 2019.

You'll be seeing sewer cleaning and inspection equipment in various areas of Town this fall and next spring, and for portions of the next several years as we conduct condition assessments of our system in advance of the Town's roadway pavement management capital plan. We have also been doing corrective and preventative maintenance of many sewer manhole frames and covers and repairing broken asphalt around the manholes. We continue to make progress and improvements and look to you for support and patience during any of this work.

Work Completed/Ongoing:

Capital Planning/Capital Projects

- Design submittals for project financing approval by the State were made for the sewer interceptor rehabilitation project along Nantasket Avenue and Fitzpatrick Way and the Atlantic Avenue/Gunrock Area pipeline renewal project. We expect approvals by April 2019. Construction for both projects is planned in 2019.
- We are reviewing the Town's pavement management capital plan to coordinate sewer inspections in advance of any paving work. These inspections will help determine if any sewer repairs or replacements are needed before the roads are paved.

Quarterly Sewer Billing

The last billing reflected a change in our rate structure to help provide a more sustainable revenue source for operations and capital projects by creating a base fee. We have now moved to quarterly billing as indicated in the current sewer bill. With this we expect to provide a steadier source of revenue over the year while making it easier for our customers to pay each bill.

For information, the average annual sewer bill is \$1,090, based on 70 units of water used. By dividing these amounts by four, you can see how your bill compares to the average, \$272.50 and 17.5 units, respectively.

If your water usage is significantly greater than prior usage for a comparable time-frame for no apparent reason, you may want to check your plumbing systems for leaks.

Please note that a lien will be placed on any unpaid sewer bills from FY 2017 and FY 2018 on the FY 19 Real Estate bill due February 4, 2019.

Winter Closings

If you close your property over the winter, or leave it unattended for an extended period, especially in cold weather, be sure to winterize your plumbing system to prevent freeze ups and unnecessary water and sewer repairs and associated high bills.

Check out our website and New Facebook page.



www.town.hull.ma.us/sewerdepartment



Hull Sewer Department

- In November, we will be replacing the two pumps at Pump Station No. 1 on Atlantic Avenue. In
 addition, we will conduct training with Hull Fire Department to coordinate the work and confined space
 conditions, so they know in advance what to expect in the event of an emergency at any of
 our pumping stations.
- Other work underway includes further assessing the secondary clarifiers to determine if
 repairs to a hole in the return sludge piping about 16 feet underground can be made without
 considerable demolition and reconstruction. We are also testing one of the clarifiers to
 determine if a different operation approach can be used without the use of that piping. If this
 approach works, we can bypass the piping and make repairs to one clarifier while we plan on
 replacing all mechanical equipment in the other one.

Plant Resiliency

- A new HVAC system has been designed for the first and second floor of the Administration Building. However, we've asked the consultants if we can relocate the mechanical systems to the second floor and stay within our budget. Construction is still targeted for early/mid 2019.
- We removed the 40+ year old underground fuel storage tank and are preparing to install an above ground and elevated tank. A temporary above ground tank has been in place most of this year to provide diesel fuel for our generators and pumps.
- Work is underway to relocate and elevate our ground-mounted electrical transformer, funded by a 50% match grant through the State Coastal Zone Management. Construction is planned for early/mid 2019.
- Flood-proofing remedial measures in the effluent pump room are expected by year-end. This
 will prevent water from finding its way into other areas of the plant in the event of a failure of
 some sort in that room.

Odor Control

 We continue to be proactive in addressing odors by anticipating what work activities might generate odors—such as tank cleanings—using chemicals in the collection system to minimize odor potential. The odor scrubber filter material is currently being replaced.

Technology Enhancements

- We continue to enhance our GIS sewer mapping and documentation system and the Town
 received a regional grant to advance this effort. The State grant project is in the process of
 being completed at which point we will update our base mapping for the system we now use.
- The Town was also part of a regional effort to obtain new GIS and orthographic mapping, which
 provides the most recent surface features and will be useful to many Town departments. The mapping
 was just completed, and we are coordinating to update the relevant systems.
- The State's energy grant project is in progress and should be completed by early November. Efficiency
 improvements include aeration system modifications, odor control optimization, and generator block
 heater. These improvements are expected to result in substantial energy savings.



Secondary clarifier which treats wastewater and settles solids for further processing.



Fuel storage tank after it was removed from the ground-no soil or groundwater contamination was found.

We continue to get emergency calls for clogged pipes, pumps and equipment. Many of these result in wastewater discharges to the ground which could have been avoided. Such discharges must be reported to numerous local, state, and federal agencies and could result in fines. Our goal is to avoid any discharges, fines and violations.

PLEASE DO YOUR PART BY KNOWING WHAT NOT TO PUT IN THE SEWER

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Sewer Works

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Newsletter of the Hull Permanent Sewer Commission Winter 2018

Message from the Director of Wastewater Operations

Since the Summer newsletter, significant progress has been made to improve the reliability and functionality of much of the equipment at the wastewater treatment facility as well as to plan and position us for future improvements. The Headworks influent gate installation has been completed on time and within budget. This gate is a replacement of a former gate that was no longer operable and by having it in place, provides a way for us to regulate the incoming flow to the facility during a flow event and/or allow us to divert flow to perform repairs within the facility. We also replaced piping and valves on the five influent pumps to provide a way to isolate each pump for maintenance. We are planning a similar project for the effluent pumps. These types of projects provide greater reliability and functionality for our operations. We received approval of approximately \$8.3 million through the DEP State Revolving Loan Fund program which will provide low interest loan funding for three construction projects planned for late this year or early in 2019. We have authorized our consultant to proceed with the designs for these projects in anticipation of receiving town meeting approval to proceed with these projects. See sidebar for information about the projects. We also received notice that a \$4 million grant through MEMA and FEMA to relocate the electrical and HVAC systems at the wastewater treatment facility has advanced to the national level. This is a very competitive program and if successful will provide increased resiliency for our most vulnerable components at the plant. Lastly, we also received approval for a \$200,000 grant through the state Community Compact program, to advance the viability of expanding sewer service to portions of Cohasset and Scituate. More information about each of these projects will be provided at various public meetings planned prior to town meeting in May.

John J. Struzziery, P.E.

Director of Wastewater Operations

Sewer Billing

The sewer billing for this period maintains the same unit rate as the past billing. As indicated in previous newsletters, the cost of providing sewer service has and will continue to increase primarily due to increased regulations; recovery from the 2013 failure of pumps and equipment at the facility; and maintenance/replacement of equipment and systems that have reached their useful service life after 40 years.

As indicated in the last Newsletter, the Sewer Department used last year to perform condition assessments of much of the sewer infrastructure and developed a capital and funding plan to finance needed system improvements. We have actively pursued outside funding in terms of grants and low interest loans and have been successful and optimistic that pending applications will be approved.

The Permanent Sewer Commission is currently reviewing various sewer rate and billing methodologies, including quarterly billing, to more equitably assess our costs among all users. Any adjustment will be reflected in the August billing. We will provide additional information once the rate and billing approach is approved.

Emergency Planning:

In the Fall, we conducted two days of Fire Department orientation and familiarization of the wastewater treatment facility. This coordination provided emergency personnel with the plant layout, safety considerations and plans, chemicals stored on site, and potential dangers that might be encountered in the event of an emergency.



Work Completed/Ongoing:

Capital Planning/Capital Projects

- Design is underway for the interceptor sewer along Nantasket Avenue and Fitzpatrick Way to be renewed without excavation using a cured-in-place lining system. Construction is planned in late 2018/2019.
- Design is underway for a pipeline renewal plan for the Atlantic Avenue/Gunrock area. Construction is planned for 2019.
- Condition assessments of the force mains (pressure pipes) for Pump Station #1 on Atlantic Avenue and Pump Station #3 along George Washington Boulevard will be conducted in the Spring. If necessary, design will then proceed for the renewal/replacement and will be included in the other projects noted above.
- Design of critical replacements of equipment at the wastewater treatment facility will also be started later this year.

Protection of Plant during High Flows

- An auxiliary pump and piping to supplement effluent pumping needs as well high flow diversion is scheduled for completion in early 2018.
- Design for relocating the electrical and HVAC systems to the second floor of the Administration Building is planned for the second half of this year.
- Replacement of the effluent pump isolation valves is expected by mid-year.

Odor Control

• We will again be planning for chemical odor control measures during the late Spring and Summer months.

Technology Enhancements

• We continue to enhance our GIS mapping and documentation system and will be seeking outside funding for this effort.

Reminders – Please help us keep costs down by doing your part – Things that you can do include:

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